## RECEIVER PORTFOLIO AND NAMING



Receivers have been developed and manufactured by Knowles for well over 50 years. This has resulted in a very broad range products with form factors and features for many different applications. This document shows all the available series to help the user identify the one(s) that might best suit their application.

#### Series Overview

The receiver series is designated by the model number prefix, e.g. model number RAB-32581-000 is in the RAB series. Before 2015 the series were assigned a sequential two letter designation which was added to to indicate how the base receiver was modified e.g. FED is a ferrofluid damped version of ED.

After 2015 the series start with an R to signify receiver, followed by a sequential two letter designation. The middle letter indicates whether the receiver is a dual (D) or dual diaphragm (L) version. This is summarized in Table 1 for commonly used designations.

Table 1 – Commonly used Series designations

| Series | Receiver type     | Creation date |
|--------|-------------------|---------------|
| **     | Any               |               |
| D**    | Dual              |               |
| WB**   | Wideband          | before 2015   |
| HO**   | High Output       |               |
| F**    | Ferrofluid damped |               |
| RA*    | Single            |               |
| RD*    | Dual              | 2015 -        |
| RL*    | Dual Diaphragm    |               |

\* - wildcard

The prefix RVA is used for models where receivers are built into complex assemblies e.g. RIC (Receiver in Canal) assemblies.

The following tables show the available series for the different receiver types. A table showing them all is provided in the Appendix.





## Single Receivers

|        |                |                                    |                |               |                |                 |        | Re     | elated Series     | - x shows al         | ready includ          | ed       |                          |
|--------|----------------|------------------------------------|----------------|---------------|----------------|-----------------|--------|--------|-------------------|----------------------|-----------------------|----------|--------------------------|
| Series | Power<br>Level | Description                        | Length<br>(mm) | Width<br>(mm) | Height<br>(mm) | Volume<br>(mm³) | Single | Dual   | Dual<br>Diaphragm | Ferrofluid<br>Damped | Automated<br>Assembly | Wideband | HF<br>Enhanced<br>Option |
| RAH    |                |                                    | 3.00           | 3.00          | 2.00           | 18              | X      | RDH    |                   |                      |                       |          |                          |
| RAA    |                |                                    | 5.08           | 2.59          | 1.40           | 18              | x      | RDA    |                   |                      |                       |          |                          |
| FK     |                |                                    | 5.00           | 2.73          | 1.93           | 26              | X      | DFK    |                   | FFK                  | RAP                   | WBFK     | X                        |
| WBFK   |                | Wideband FK                        | 5.00           | 2.73          | 1.93           | 26              | X      | DWFK   |                   |                      | RAN                   | х        |                          |
| FFK    | Low            | FK + ferrofluid damping            | 5.00           | 2.73          | 1.93           | 26              | X      |        |                   | X                    |                       |          |                          |
| RAN    | LOW            | Automated assembly version of WBFK | 5.11           | 2.83          | 2.03           | 29              | X      | RDN    |                   |                      | X                     |          |                          |
| RAU    |                | Wideband RAN                       | 5.11           | 2.83          | 2.03           | 29              | X      | RDU    |                   |                      |                       |          |                          |
| RAP    |                | Automated assembly version of FK   | 5.11           | 2.83          | 2.03           | 29              | X      | RDP    |                   |                      | X                     |          |                          |
| FH     |                |                                    | 5.09           | 2.80          | 2.59           | 37              | X      | FJ     |                   | FFH                  |                       |          |                          |
| FFH    |                | FH + ferrofluid damping            | 5.09           | 2.80          | 2.59           | 37              | x      |        |                   | X                    |                       |          |                          |
| RAF    |                | RAB but with terminals on base     | 5.15           | 2.96          | 2.58           | 39              | X      |        |                   |                      |                       |          |                          |
| RAB    |                |                                    | 5.15           | 2.96          | 2.58           | 39              | x      | RDB    |                   |                      | RAQ                   |          | х                        |
| RAE    |                | RAB but with stainless steel case  | 5.15           | 2.96          | 2.58           | 39              | х      |        |                   |                      |                       |          |                          |
| RAQ    |                | Automated assembly version of RAB  | 5.32           | 3.06          | 2.69           | 44              | X      | RDQ    | RLQ               |                      | X                     |          |                          |
| HC     |                | High output FC                     | 5.16           | 3.51          | 3.00           | 54              | x      |        |                   | FHC                  |                       | WBHC     |                          |
| WBHC   | Medium         | Wideband HC                        | 5.16           | 3.51          | 3.00           | 54              | х      |        |                   |                      |                       | х        |                          |
| FHC    |                | HC + ferrofluid damping            | 5.16           | 3.51          | 3.00           | 54              | х      |        |                   | X                    |                       |          |                          |
| EH     |                |                                    | 5.19           | 3.55          | 3.00           | 55              | х      |        |                   | FEH                  |                       |          |                          |
| FC     |                |                                    | 5.18           | 3.55          | 3.00           | 55              | х      |        |                   | FFC                  |                       |          |                          |
| FFC    |                | FC + ferrofluid damping            | 5.18           | 3.55          | 3.00           | 55              | х      |        |                   | X                    |                       |          |                          |
| FEH    |                | EH + ferrofluid damping            | 5.19           | 3.55          | 3.00           | 55              | х      |        |                   | X                    |                       |          |                          |
| ED     |                |                                    | 6.29           | 4.28          | 2.97           | 80              | х      | EJ     |                   | FED                  |                       |          |                          |
| FED    |                | ED + ferrofluid damping            | 6.32           | 4.31          | 2.97           | 81              | x      |        |                   | X                    |                       |          |                          |
| TEC    | no-k           | · -                                | 7.87           | 4.09          | 2.79           | 90              | х      | DTEC   |                   | FTEC                 |                       |          |                          |
| HOTEC  | High           | High Output TEC                    | 7.87           | 4.09          | 2.79           | 90              | x      | HODTEC |                   |                      |                       |          |                          |
| RAI    |                |                                    | 7.87           | 4.09          | 2.79           | 90              | х      | RDI    | RLI               |                      |                       |          | х                        |
| FTEC   |                | TEC + ferrofluid damping           | 7.87           | 4.09          | 2.79           | 90              | х      |        |                   | Х                    |                       |          |                          |
| EF     |                | · -                                | 7.87           | 5.59          | 4.01           | 176             | х      |        |                   | FEF                  |                       |          |                          |
| ВК     | Super          |                                    | 7.87           | 5.59          | 4.01           | 176             | х      |        |                   |                      |                       |          |                          |
| FEF    |                | EF + ferrofluid damping            | 7.87           | 5.59          | 4.01           | 176             | X      |        |                   | X                    |                       |          |                          |
| CI     | Ultra          | . 0                                | 9.47           | 7.18          | 4.10           | 279             | х      |        |                   |                      |                       |          |                          |

|         |                |   |                |               |                |                 |        | Re   | elated Series     | - x shows al         | ready includ          | ed       |                          |
|---------|----------------|---|----------------|---------------|----------------|-----------------|--------|------|-------------------|----------------------|-----------------------|----------|--------------------------|
| Series  | Power<br>Level | Description                                   | Length<br>(mm) | Width<br>(mm) | Height<br>(mm) | Volume<br>(mm³) | Single | Dual | Dual<br>Diaphragm | Ferrofluid<br>Damped | Automated<br>Assembly | Wideband | HF<br>Enhanced<br>Option |
| RDA     | Low            | Dual RAA                                      | 5.08           | 2.59          | 2.79           | 37              | RAA    | X    |                   |                      |                       |          |                          |
| RDH     | LOW            | Dual RAH                                      | 3.00           | 3.00          | 4.14           | 37              | RAH    | X    |                   |                      |                       |          |                          |
| RDJ     |                |   | 5.94           | 2.54          | 3.10           | 47              |        | X    |                   |                      |                       |          |                          |
| GD      |                |   | 5.99           | 3.10          | 2.59           | 48              |        | X    |                   |                      |                       |          |                          |
| GD30    |                | GD but with 0.007" thick µmetal case          | 6.10           | 3.20          | 2.69           | 53              |        | X    |                   |                      |                       |          |                          |
| GD40    |                | GD but with 0.007" thick stainless steel case | 6.10           | 3.20          | 2.69           | 53              |        | X    |                   |                      |                       |          |                          |
| TWFK    |                | Two Way (woofer/tweeter) hi-fi FK             | 5.00           | 2.73          | 3.86           | 53              |        | X    |                   |                      |                       |          |                          |
| SWFK    | Medium         | Super Wideband FK: pair of tweeter FK         | 5.00           | 2.73          | 3.86           | 53              |        | X    |                   |                      |                       | х        |                          |
| DFK     |                | Dual FK                                       | 5.00           | 2.73          | 3.86           | 53              | FK     | X    |                   |                      |                       |          |                          |
| DWFK    |                | Dual Wideband FK                              | 5.00           | 2.73          | 3.86           | 53              | WBFK   | X    |                   |                      |                       | X        |                          |
| RDD     |                | Dual RAD                                      | 5.00           | 2.73          | 3.86           | 53              | RAD    | X    |                   |                      |                       |          |                          |
| RDP     |                | Dual RAP                                      | 5.11           | 2.83          | 4.06           | 59              | RAP    | X    |                   |                      |                       |          |                          |
| RDN     |                | Dual RAN                                      | 5.11           | 2.83          | 4.06           | 59              | RAN    | X    |                   |                      |                       |          |                          |
| FJ      |                | Dual FH                                       | 5.08           | 2.79          | 5.18           | 73              | FH     | X    |                   |                      |                       |          |                          |
| RDB     | High           | Dual RAB                                      | 5.15           | 2.96          | 5.16           | 79              | RAB    | X    |                   |                      |                       |          |                          |
| RDL     | riigii         |   | 6.09           | 4.31          | 3.20           | 84              |        | X    |                   |                      |                       |          |                          |
| GR      |                |   | 6.10           | 3.20          | 4.32           | 84              |        | x    |                   |                      |                       |          |                          |
| EJ      |                | Dual ED                                       | 6.30           | 4.29          | 6.17           | 167             | ED     | X    |                   |                      |                       |          |                          |
| HODTEC  |                | Dual HOTEC                                    | 7.87           | 4.09          | 5.23           | 168             | HOTEC  | x    |                   |                      |                       |          |                          |
| DTECLP  | Super          | Low profile DTEC                              | 7.87           | 4.09          | 5.23           | 168             |        | X    |                   |                      |                       |          |                          |
| RDI     | Super          | Dual RAI                                      | 7.87           | 4.09          | 5.23           | 168             | RAI    | X    |                   |                      |                       |          | X                        |
| DTEC    | -              | Dual TEC                                      | 7.87           | 4.09          | 5.59           | 180             | TEC    | X    |                   |                      |                       |          |                          |
| HODVTEC |                | Dual HOVTEC                                   | 7.87           | 4.09          | 5.59           | 180             |        | x    |                   |                      |                       |          |                          |





# **Dual Diaphragm Receivers**

|   | Series Powe<br>Leve | _      |                               |      |      |      | Volume<br>(mm³) |        | Re   | elated Series     | - x shows al | ready includ          | led      |                          |
|---|---------------------|--------|-------------------------------|------|------|------|-----------------|--------|------|-------------------|--------------|-----------------------|----------|--------------------------|
|   |                     | Level  | Description                   | (mm) | (mm) |      |                 | Single | Dual | Dual<br>Diaphragm |              | Automated<br>Assembly | Wideband | HF<br>Enhanced<br>Option |
| Г | RLQ                 | Medium | Dual diaphragm version of RAQ | 5.32 | 3.06 | 3.33 | 54              | RAQ    |      | X                 |              | X                     |          |                          |
|   | RLI                 | Super  | Dual diaphragm version of RAI | 7.87 | 4.09 | 3.56 | 115             | RAI    |      | X                 |              |                       |          |                          |

## Ferrofluid damped Receivers

|        |                |                          |                | Width |                |                 |        | Re   | elated Series     | - x shows al         | ready includ          | ed       |                          |
|--------|----------------|--------------------------|----------------|-------|----------------|-----------------|--------|------|-------------------|----------------------|-----------------------|----------|--------------------------|
| Series | Power<br>Level | Description              | Length<br>(mm) | (mm)  | Height<br>(mm) | Volume<br>(mm³) | Single | Dual | Dual<br>Diaphragm | Ferrofluid<br>Damped | Automated<br>Assembly | Wideband | HF<br>Enhanced<br>Option |
| FFK    | Low            | FK + ferrofluid damping  | 5.00           | 2.73  | 1.93           | 26              | x      |      |                   | X                    |                       |          |                          |
| FFH    | LOW            | FH + ferrofluid damping  | 5.09           | 2.80  | 2.59           | 37              | X      |      |                   | X                    |                       |          |                          |
| FHC    |                | HC + ferrofluid damping  | 5.16           | 3.51  | 3.00           | 54              | X      |      |                   | X                    |                       |          |                          |
| FFC    | Medium         | FC + ferrofluid damping  | 5.18           | 3.55  | 3.00           | 55              | X      |      |                   | X                    |                       |          |                          |
| FEH    |                | EH + ferrofluid damping  | 5.19           | 3.55  | 3.00           | 55              | X      |      |                   | X                    |                       |          |                          |
| FED    | High           | ED + ferrofluid damping  | 6.32           | 4.31  | 2.97           | 81              | x      |      |                   | X                    |                       |          |                          |
| FTEC   | nign           | TEC + ferrofluid damping | 7.87           | 4.09  | 2.79           | 90              | X      |      |                   | X                    |                       |          |                          |
| FEF    | Super          | EF + ferrofluid damping  | 7.87           | 5.59  | 4.01           | 176             | x      |      |                   | X                    |                       |          |                          |

## **Automated Assembly Series**

|        |                |                                    |                |               | Height |       |        | Re   | elated Series     | - x shows al | ready includ          | ed       |                          |
|--------|----------------|------------------------------------|----------------|---------------|--------|-------|--------|------|-------------------|--------------|-----------------------|----------|--------------------------|
| Series | Power<br>Level | Description                        | Length<br>(mm) | Width<br>(mm) |        | (mm³) | Single | Dual | Dual<br>Diaphragm |              | Automated<br>Assembly | Wideband | HF<br>Enhanced<br>Option |
| RAN    | Low            | Automated assembly version of WBFK | 5.11           | 2.83          | 2.03   | 29    | х      | RDN  |                   |              | х                     |          |                          |
| RAP    | LOW            | Automated assembly version of FK   | 5.11           | 2.83          | 2.03   | 29    | х      | RDP  |                   |              | x                     |          |                          |
| RAQ    | Modium         | Automated assembly version of RAB  | 5.32           | 3.06          | 2.69   | 44    | Х      | RDQ  | RLQ               |              | X                     |          |                          |
| RLQ    | Medium -       | Dual diaphragm version of RAQ      | 5.32           | 3.06          | 3.33   | 54    | RAQ    |      | X                 |              | x                     |          |                          |

#### Wideband Receivers

|        |                |                                       |                |               |                |                 |        | Re   | elated Series     | - x shows al         | ready includ          | ed       |                          |
|--------|----------------|---------------------------------------|----------------|---------------|----------------|-----------------|--------|------|-------------------|----------------------|-----------------------|----------|--------------------------|
| Series | Power<br>Level | Description                           | Length<br>(mm) | Width<br>(mm) | Height<br>(mm) | Volume<br>(mm³) | Single | Dual | Dual<br>Diaphragm | Ferrofluid<br>Damped | Automated<br>Assembly | Wideband | HF<br>Enhanced<br>Option |
| WBFK   | Low            | Wideband FK                           | 5.00           | 2.73          | 1.93           | 26              | x      | DWFK |                   |                      | RAN                   | X        |                          |
| SWFK   |                | Super Wideband FK: pair of tweeter FK | 5.00           | 2.73          | 3.86           | 53              |        | X    |                   |                      |                       | X        |                          |
| DWFK   | Medium         | Dual Wideband FK                      | 5.00           | 2.73          | 3.86           | 53              | WBFK   | х    |                   |                      |                       | X        |                          |
| WBHC   |                | Wideband HC                           | 5.16           | 3.51          | 3.00           | 54              | x      |      |                   |                      |                       | х        |                          |





## **Enhanced High Frequency Receivers**

High frequency enhanced versions of these models provide additional output at ~3-6kHz.

|        |                |             |                |               | II-i-ba | Volume |        | Re   | elated Series     | - x shows al | ready includ          | ed       |                          |
|--------|----------------|-------------|----------------|---------------|---------|--------|--------|------|-------------------|--------------|-----------------------|----------|--------------------------|
| Series | Power<br>Level | Description | Length<br>(mm) | Width<br>(mm) |         | (mm³)  | Single | Dual | Dual<br>Diaphragm |              | Automated<br>Assembly | Wideband | HF<br>Enhanced<br>Option |
| FK     | Low            |             | 5.00           | 2.73          | 1.93    | 26     | X      | DFK  |                   | FFK          | RAP                   | WBFK     | X                        |
| RAB    | Medium         |             | 5.15           | 2.96          | 2.58    | 39     | X      | RDB  |                   |              | RAQ                   |          | x                        |
| RAI    | High           |             | 7.87           | 4.09          | 2.79    | 90     | X      | RDI  | RLI               |              |                       |          | x                        |
| RDI    | Super          | Dual RAI    | 7.87           | 4.09          | 5.23    | 168    | RAI    | X    |                   |              |                       |          | x                        |

## **Revision History**

| Revision | Description     | ECR       | Date     |
|----------|-----------------|-----------|----------|
| Α        | Initial Release | P10006073 | 02-22-22 |
|          |                 |           |          |
|          |                 |           |          |
|          |                 |           |          |
|          |                 |           |          |





# Appendix

The following tables show all available series with increasing volume.

| Power   Level   Description  | s already included | d    |                          |
|--|--------------------|------|--------------------------|
| RAA   FK   Wideband FK   S.00   2.73   1.93   26   | V                  |      | HF<br>Enhanced<br>Option |
| FK   WBFK   FFK   WBFK   FFK   WBFK   FFK   WBFK   FFK   WBFK   FFK   WBFK   FFK   FFFK   WBFK   FFK   FFFK   FFFK   FFFK   WBFK   FFK   FFFK   FFF |                    |      |                          |
| Wideband FK  |                    |      |                          |
| FFK   RAN   LOW   Automated assembly version of WBFK   5.11   2.83   2.03   29   x   RDN   RDN   RDA   Automated assembly version of FK   5.11   2.83   2.03   29   x   RDD   RDA   Automated assembly version of FK   5.11   2.83   2.03   29   x   RDD   RDA   Automated assembly version of FK   5.11   2.83   2.03   29   x   RDD   RDA   Automated assembly version of FK   5.11   2.83   2.03   29   x   RDD   RDA   Automated assembly version of FK   5.11   2.83   2.03   29   x   RDD   RDA   RD | RAP                | WBFK | X                        |
| RAN   RAU   LOW   Automated assembly version of WBFK   S.11   2.83   2.03   29   x   RDN     RDN     RAP   Mideband RAN   S.11   2.83   2.03   29   x   RDU     RDN     RDA   Automated assembly version of FK   S.11   2.83   2.03   29   x   RDD     RDA   RDA | RAN                | x    |                          |
| RAU   RAP   Automated assembly version of FK   S.11   2.83   2.03   29   x   RDU   RDA   Automated assembly version of FK   S.11   2.83   2.03   29   x   RDP   RDA    |                    |      |                          |
| RAU   Automated assembly version of FK   S.11   2.83   2.03   29   x   RDU   | х                  |      |                          |
| RDA   FH   FH   FH   FH   FH   FH   FH   F   |                    |      |                          |
| FH   | x                  |      |                          |
| FFH  |                    |      |                          |
| RAF   RAF   RAB but with terminals on base   5.15   2.96   2.58   39   x   |                    |      |                          |
| RAF   RAF   RAB but with terminals on base   5.15   2.96   2.58   39   x   |                    |      |                          |
| RAB         5.15         2.96         2.58         39         x         RDB           RAE         RAB but with stainless steel case         5.15         2.96         2.58         39         x         RDB           RDJ         Automated assembly version of RAB         5.32         3.06         2.69         44         x         RDQ         RLQ           GD         5.94         2.54         3.10         47         x         x         GD         GD         5.99         3.10         2.59         48         x         X         GD         GD         5.99         3.10         2.59         48         x         X         GD         6.10         3.20         2.69         53         x         X         GD         5.99         3.10         2.59         48         x         X         GD         5.00         2.69         53         x         X         X         GD         5.00         2.69         53         x         X <td< td=""><td></td><td></td><td></td></td<>  |                    |      |                          |
| RAE         RAQ         RAQ         Automated assembly version of RAB         5.32         3.06         2.69         44         x         RDQ         RLQ           RDJ         5.94         2.54         3.10         47         x         x           GD30         5.94         2.54         3.10         47         x         x           GD but with 0.007" thick pmetal case         6.10         3.20         2.69         53         x         GD but with 0.007" thick stainless steel case         6.10         3.20         2.69         53         x         GD but with 0.007" thick stainless steel case         6.10         3.20         2.69         53         x         GD but with 0.007" thick stainless steel case         6.10         3.20         2.69         53         x         GD but with 0.007" thick stainless steel case         6.10         3.20         2.69         53         x         GD but with 0.007" thick stainless steel case         6.10         3.20         2.69         53         x         GD but with 0.007" thick stainless steel case         6.10         3.20         2.69         53         x         X         GD but with 0.007" thick stainless steel case         6.10         3.20         2.69         53         x         X         X         X         X </td <td></td> <td></td> <td></td>   |                    |      |                          |
| RAQ   RDJ  | RAQ                |      | X                        |
| RDJ  |                    |      |                          |
| Space  | х                  |      | ,                        |
| GD30 GD40 TWFK SWFK DFK DWFK RDD RLQ HC WBHC FFC FFC FFC FFC FFC FFC FFC FFC FFC F   |                    |      |                          |
| GD40         GD but with 0.007" thick stainless steel case         6.10         3.20         2.69         53         x           TWFK         Two Way (woofer/tweeter) hi-fi FK         5.00         2.73         3.86         53         x           SWFK         DFK         Dual FK         5.00         2.73         3.86         53         x           DWFK         Dual FK         5.00         2.73         3.86         53         FK         x           RDD         BRLQ         Dual Wideband FK         5.00         2.73         3.86         53         RAD         x           BRLQ         HC         Dual diaphragm version of RAQ         5.32         3.06         3.33         54         RAQ         x           WBHC         Wideband HC         5.16         3.51         3.00         54         x         FHC           WHC+ ferrofluid damping         5.16         3.51         3.00         54         x         X           FC         FFC         5.18         3.55         3.00         55         x         FEH           FC         FC+ ferrofluid damping         5.18         3.55         3.00         55         x         x           FEH   |                    |      |                          |
| TWFK           SWFK           DFK           DWFK           DWFK           Medium           RDD           RLQ         Dual RAD         5.00         2.73         3.86         53         FK         X           Dual RAD         5.00         2.73         3.86         53         RAD         X           BLQ         HC         Dual diaphragm version of RAQ         5.32         3.06         3.33         54         RAQ         X           High output FC         5.16         3.51         3.00         54         X         FHC           WBHC         Wideband HC         5.16         3.51         3.00         54         X         FHC           EH         FC         FFC         5.19         3.55         3.00         55         X         FEH           FC         FC+ ferrofluid damping         5.18         3.55         3.00         55         X         X           FEH         FFC           FEH         Ferrofluid damping         5.19         3.55         3.00         55         X         X  |                    |      |                          |
| SWFK           DFK         Dual FK         5.00         2.73         3.86         53         X           DWFK         Dual FK         5.00         2.73         3.86         53         FK         X           RDD         Dual RAD         5.00         2.73         3.86         53         RAD         X           BLQ         HC         Dual diaphragm version of RAQ         5.32         3.06         3.33         54         RAQ         X           High output FC         5.16         3.51         3.00         54         X         FHC           Wideband HC         5.16         3.51         3.00         54         X         FHC           FH         FC         FC + ferrofluid damping         5.16         3.51         3.00         54         X         X           FEH         FC         FFC         5.18         3.55         3.00         55         X         FFC           FFC         FFC + ferrofluid damping         5.18         3.55         3.00         55         X         X           FEH         FFC         FFC         FFC         FFC         FFC         FFC         FFC         FFC         FFC <td></td> <td></td> <td></td>  |                    |      |                          |
| SWFK           DFK         Dual FK         5.00         2.73         3.86         53         X           DWFK         Dual FK         5.00         2.73         3.86         53         FK         X           RDD         Dual RAD         5.00         2.73         3.86         53         RAD         X           BLQ         HC         Dual diaphragm version of RAQ         5.32         3.06         3.33         54         RAQ         X           High output FC         5.16         3.51         3.00         54         X         FHC           Wideband HC         5.16         3.51         3.00         54         X         FHC           FH         FC         FC + ferrofluid damping         5.16         3.51         3.00         54         X         X           FEH         FC         FFC         5.18         3.55         3.00         55         X         FFC           FFC         FFC + ferrofluid damping         5.18         3.55         3.00         55         X         X           FEH         FFC         FFC         FFC         FFC         FFC         FFC         FFC         FFC         FFC <td></td> <td></td> <td></td>  |                    |      |                          |
| DFK           DWFK           DWIFK         5.00         2.73         3.86         53         FK         x           RDD         Dual Wideband FK         5.00         2.73         3.86         53         WBFK         x           RLQ         Dual diaphragm version of RAQ         5.32         3.06         3.33         54         RAQ         x           HIgh output FC         5.16         3.51         3.00         54         x         FHC           Wideband HC         5.16         3.51         3.00         54         x         X           HC + ferrofluid damping         5.16         3.51         3.00         54         x         x           FC         FFC         5.18         3.55         3.00         55         x         FFEH           FC + ferrofluid damping         5.18         3.55         3.00         55         x         x           FEH         FFC         FFC + ferrofluid damping         5.19         3.55         3.00         55         x         x  |                    | x    | -                        |
| RDD         Dual RAD         5.00         2.73         3.86         53         RAD         x           RLQ         Dual diaphragm version of RAQ         5.32         3.06         3.33         54         RAQ         x           HC         High output FC         5.16         3.51         3.00         54         x         FHC           WBHC         Wideband HC         5.16         3.51         3.00         54         x         x           FHC         HC + ferrofluid damping         5.16         3.51         3.00         54         x         x           EH         5.19         3.55         3.00         55         x         FEH           FC         5.18         3.55         3.00         55         x         FFC           FFC         FC + ferrofluid damping         5.18         3.55         3.00         55         x         x           FEH         EH + ferrofluid damping         5.19         3.55         3.00         55         x         x  |                    |      |                          |
| RDD         Dual RAD         5.00         2.73         3.86         53         RAD         x           RLQ         Dual diaphragm version of RAQ         5.32         3.06         3.33         54         RAQ         x           HC         High output FC         5.16         3.51         3.00         54         x         FHC           WBHC         Wideband HC         5.16         3.51         3.00         54         x         X           FHC         HC + ferrofluid damping         5.16         3.51         3.00         54         x         x           EH         5.19         3.55         3.00         55         x         FEH           FC         5.18         3.55         3.00         55         x         FFC           FFC         FC + ferrofluid damping         5.18         3.55         3.00         55         x         x           FEH         EH + ferrofluid damping         5.19         3.55         3.00         55         x         x  |                    | х    |                          |
| RLQ         Dual diaphragm version of RAQ         5.32         3.06         3.33         54         RAQ         x           HC         High output FC         5.16         3.51         3.00         54         x         FHC           WBHC         Wideband HC         5.16         3.51         3.00         54         x         X           FHC         HC + ferrofluid damping         5.16         3.51         3.00         54         x         x         x           FC         FC         5.19         3.55         3.00         55         x         FEH           FFC         FC + ferrofluid damping         5.18         3.55         3.00         55         x         x           FEH         FFC         FC + ferrofluid damping         5.19         3.55         3.00         55         x         x   |                    |      |                          |
| HC         High output FC         5.16         3.51         3.00         54         x         FHC           WBHC         Wideband HC         5.16         3.51         3.00         54         x         x           FHC         HC + ferrofluid damping         5.16         3.51         3.00         54         x         x           EH         5.19         3.55         3.00         55         x         FEH           FC         5.18         3.55         3.00         55         x         FFC           FFC         FC + ferrofluid damping         5.18         3.55         3.00         55         x         x           FEH         EH + ferrofluid damping         5.19         3.55         3.00         55         x         x   | х                  |      |                          |
| WBHC         Wideband HC         5.16         3.51         3.00         54         x           FHC         HC + ferrofluid damping         5.16         3.51         3.00         54         x         x           EH         5.19         3.55         3.00         55         x         FEH           FC         5.18         3.55         3.00         55         x         FFC           FFC         FC + ferrofluid damping         5.18         3.55         3.00         55         x         x           FEH         EH + ferrofluid damping         5.19         3.55         3.00         55         x         x   |                    | WBHC |                          |
| FHC         HC+ferrofluid damping         5.16         3.51         3.00         54         x         x           EH         5.19         3.55         3.00         55         x         FEH           FC         5.18         3.55         3.00         55         x         FFC           FFC         FC+ferrofluid damping         5.18         3.55         3.00         55         x         x           FEH         EH+ferrofluid damping         5.19         3.55         3.00         55         x         x  |                    | х    |                          |
| EH         5.19         3.55         3.00         55         x         FEH           FC         5.18         3.55         3.00         55         x         FFC           FFC         FC + ferrofluid damping         5.18         3.55         3.00         55         x         x           FEH         EH + ferrofluid damping         5.19         3.55         3.00         55         x         x  |                    |      |                          |
| FC         5.18         3.55         3.00         55         x         FFC           FFC         FC + ferrofluid damping         5.18         3.55         3.00         55         x         x           FEH         EH + ferrofluid damping         5.19         3.55         3.00         55         x         x   |                    |      |                          |
| FFC         FC + ferrofluid damping         5.18         3.55         3.00         55         x         x           FEH         EH + ferrofluid damping         5.19         3.55         3.00         55         x         x  |                    |      |                          |
| FEH         EH + ferrofluid damping         5.19         3.55         3.00         55         x         x  |                    |      |                          |
|  |                    |      |                          |
|  |                    |      |                          |
| RDN Dual RAN 5.11   2.83   4.06   59   RAN   x   |                    |      |                          |





|         | _              |                               |                | Width | Height 1 |                 |        | Re     | elated Series     | - x shows al         | ready includ          | ed       |                          |
|---------|----------------|-------------------------------|----------------|-------|----------|-----------------|--------|--------|-------------------|----------------------|-----------------------|----------|--------------------------|
| Series  | Power<br>Level | Description                   | Length<br>(mm) | (mm)  | (mm)     | Volume<br>(mm³) | Single | Dual   | Dual<br>Diaphragm | Ferrofluid<br>Damped | Automated<br>Assembly | Wideband | HF<br>Enhanced<br>Option |
| FJ      |                | Dual FH                       | 5.08           | 2.79  | 5.18     | 73              | FH     | X      |                   |                      |                       |          |                          |
| RDB     |                | Dual RAB                      | 5.15           | 2.96  | 5.16     | 79              | RAB    | X      |                   |                      |                       |          |                          |
| ED      |                |                               | 6.29           | 4.28  | 2.97     | 80              | X      | EJ     |                   | FED                  |                       |          |                          |
| FED     |                | ED + ferrofluid damping       | 6.32           | 4.31  | 2.97     | 81              | X      |        |                   | X                    |                       |          |                          |
| RDL     |                |                               | 6.09           | 4.31  | 3.20     | 84              |        | X      |                   |                      |                       |          |                          |
| GR      | High           |                               | 6.10           | 3.20  | 4.32     | 84              |        | X      |                   |                      |                       |          |                          |
| RDQ     |                | Dual RAQ                      | 5.32           | 3.06  | 5.38     | 88              | RAQ    | RDQ    |                   |                      |                       |          |                          |
| TEC     |                |                               | 7.87           | 4.09  | 2.79     | 90              | X      | DTEC   |                   | FTEC                 |                       |          |                          |
| HOTEC   |                | High Output TEC               | 7.87           | 4.09  | 2.79     | 90              | X      | HODTEC |                   |                      |                       |          |                          |
| RAI     |                |                               | 7.87           | 4.09  | 2.79     | 90              | X      | RDI    | RLI               |                      |                       |          | X                        |
| FTEC    |                | TEC + ferrofluid damping      | 7.87           | 4.09  | 2.79     | 90              | X      |        |                   | X                    |                       |          |                          |
| RLI     |                | Dual diaphragm version of RAI | 7.87           | 4.09  | 3.56     | 115             | RAI    |        | x                 |                      |                       |          |                          |
| EJ      |                | Dual ED                       | 6.30           | 4.29  | 6.17     | 167             | ED     | X      |                   |                      |                       |          |                          |
| HODTEC  |                | Dual HOTEC                    | 7.87           | 4.09  | 5.23     | 168             | HOTEC  | X      |                   |                      |                       |          |                          |
| DTECLP  |                | Low profile DTEC              | 7.87           | 4.09  | 5.23     | 168             |        | X      |                   |                      |                       |          |                          |
| RDI     | Super          | Dual RAI                      | 7.87           | 4.09  | 5.23     | 168             | RAI    | X      |                   |                      |                       |          | X                        |
| EF      | Super          |                               | 7.87           | 5.59  | 4.01     | 176             | X      |        |                   | FEF                  |                       |          |                          |
| BK      |                |                               | 7.87           | 5.59  | 4.01     | 176             | X      |        |                   |                      |                       |          |                          |
| FEF     |                | EF + ferrofluid damping       | 7.87           | 5.59  | 4.01     | 176             | х      |        |                   | X                    |                       |          |                          |
| DTEC    |                | Dual TEC                      | 7.87           | 4.09  | 5.59     | 180             | TEC    | X      |                   |                      |                       |          |                          |
| HODVTEC |                | Dual HOVTEC                   | 7.87           | 4.09  | 5.59     | 180             |        | X      |                   |                      |                       |          |                          |
| CI      | Ultra          |                               | 9.47           | 7.18  | 4.10     | 279             | х      |        |                   |                      |                       |          |                          |
| QTEC    | Oitra          | Quad TEC                      | 7.87           | 8.18  | 5.59     | 360             | TEC    | DTEC   |                   |                      |                       |          |                          |

