

# Sumitomo Riko Group

# High Pressure Hoses



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Products Specification ADVANSTAR HOSE Series

 **SUMITOMO RIKO**

 **SumiRiko Hosetex, Ltd.**

DIN/SAE International Standard Hoses

ADUANSTAR★

Exceed The International Common Standrad

ADUANSTAR★

|                |                                                                    |
|----------------|--------------------------------------------------------------------|
| Hose Structure | <b>INNER COVER :</b><br>OIL RESISTANT SYNTHETIC RUBBER             |
|                | <b>REINFORCEMENT :</b> STEEL WIRE                                  |
|                | <b>OUTER COVER :</b><br>OIL AND WEATHER RESISTANT SYNTHETIC RUBBER |



■ Sumitomo Riko global hydraulic hose meet the requirements of SAE/DIN/ISO/MSHA.

|                                          |                                          |       | Exceed the International Standards<br>DIN EN853/SAE J517   DIN EN856/ISO 6803                               |                       |                       |                       |                       |             |
|------------------------------------------|------------------------------------------|-------|-------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-------------|
|                                          | mm                                       | Inch  | DIB-1SN<br>(R1T/R1S)                                                                                        | DIB-2SN<br>(R2T/R2S)  | DHD-4SP<br>(R12)      | DHD-4SH<br>(R13)      | DHD-R15               |             |
| Upper ;<br>Structure of<br>Reinforcement | 6.3                                      | 1/4   | 1W<br>22.5<br>(3,250)                                                                                       | 2W<br>40.0<br>(5,800) |                       |                       |                       |             |
|                                          | 7.9                                      | 5/16  | 1W<br>21.5<br>(3,120)                                                                                       | 2W<br>35.0<br>(5,100) |                       |                       |                       |             |
|                                          | 9.5                                      | 3/8   | 1W<br>18.0<br>(2,600)                                                                                       | 2W<br>33.0<br>(4,780) | 4S<br>44.5<br>(6,500) |                       | 4S<br>42.0<br>(6,100) |             |
|                                          | 12.7                                     | 1/2   | 1W<br>16.0<br>(2,320)                                                                                       | 2W<br>27.5<br>(4,000) | 4S<br>41.5<br>(6,000) |                       | Same as<br>DHD-4SP    |             |
|                                          | 15.9                                     | 5/8   | 1W<br>13.0<br>(1,880)                                                                                       | 2W<br>25.0<br>(3,620) | 4S<br>38.0<br>(5,500) |                       |                       |             |
|                                          | 19.0                                     | 3/4   | 1W<br>10.5<br>(1,520)                                                                                       | 2W<br>21.5<br>(3,120) |                       | 4S<br>42.0<br>(6,100) | Same as<br>DHD-4SH    |             |
|                                          | 25.4                                     | 1     | 1W<br>8.8<br>(1,280)                                                                                        | 2W<br>16.5<br>(2,400) | 4S<br>32.5<br>(4,700) | 4S<br>38.0<br>(5,500) | 4S<br>42.0<br>(6,100) |             |
|                                          | 31.8                                     | 1_1/4 | 1W<br>6.3<br>(920)                                                                                          | 2W<br>12.5<br>(1,800) |                       | 4S<br>32.5<br>(4,700) | 6S<br>42.0<br>(6,100) |             |
|                                          | 38.1                                     | 1_1/2 | 1W<br>5.0<br>(725)                                                                                          | 2W<br>9.0<br>(1300)   |                       | 4S<br>29.0<br>(4,200) |                       |             |
|                                          | 50.8                                     | 2     | 1W<br>4.0<br>(580)                                                                                          | 2W<br>8.0<br>(1,150)  |                       | 4S<br>25.0<br>(3,620) |                       |             |
| Warranty                                 | Minimum Number of<br>Impulse test Cycles |       | 300,000 Cycles                                                                                              |                       | 500,000 Cycles        |                       |                       |             |
|                                          | Period                                   |       | 1 Year                                                                                                      |                       |                       |                       |                       |             |
| Impulse Test Pressure                    |                                          |       | Max WP×133%                                                                                                 |                       |                       |                       |                       | Max WP×120% |
| Minimum Burst Pressure                   |                                          |       | Max WP×4                                                                                                    |                       |                       |                       |                       |             |
| Operating Temperature                    |                                          |       | -40℃~-100℃ For WB / -40℃~+120℃ For WS<br>(-40ℱ~+212ℱ)                      (-40ℱ~+248ℱ)                     |                       |                       |                       |                       |             |
| Application                              |                                          |       | General Hydraulic Line(Construction Machine, Other Industrial Machine),   Hydraulic fluids, Lubricating Oil |                       |                       |                       |                       |             |
| Features                                 |                                          |       | Easy assembly design because of excellent adaptabilas with general metal fittings.                          |                       |                       |                       |                       |             |

- Our global hose widely used on hydraulic equipments such as machines of construction, mining, loading, tool and iron.
- The hose can be easily identified from the specification.
- With No-skiving technology,which improves the assembly efficiency and assure high quality of cleanliness.



Excavator



Wheel loader



Mining



Harbor



Building  
Civil engineering



Agriculture

|                                                |                                          |       | SLIM Design Series                                                                               |                       |                                  |                        |
|------------------------------------------------|------------------------------------------|-------|--------------------------------------------------------------------------------------------------|-----------------------|----------------------------------|------------------------|
|                                                | mm                                       | Inch  | DIB-1 SC<br>(EN857)                                                                              | DIB-2SC<br>(EN857)    | EXS-4SP                          | EXS-4SH                |
| Upper ;<br>Structure of<br>Reinforcement       | 6.3                                      | 1/4   | 1W<br>22.5<br>(3,250)                                                                            | 2W<br>40.0<br>(5,800) |                                  |                        |
|                                                | 7.9                                      | 5/16  | 1W<br>21.5<br>(3,120)                                                                            | 2W<br>35.0<br>(5,100) |                                  |                        |
|                                                | 9.5                                      | 3/8   | 1W<br>18.0<br>(2,600)                                                                            | 2W<br>33.0<br>(4,780) |                                  |                        |
|                                                | 12.7                                     | 1/2   | 1W<br>16.0<br>(2,320)                                                                            | 2W<br>27.5<br>(4,000) | 4S<br>42.0<br>(6,100)            |                        |
| Lower ;<br>Max Working<br>Pressure<br>MPa(Psi) | 15.9                                     | 5/8   |                                                                                                  |                       | 4S<br>38.0<br>(5,500)            |                        |
|                                                | 19.0                                     | 3/4   |                                                                                                  |                       | 4S<br>38.0<br>(5,500)            |                        |
|                                                | 25.4                                     | 1     |                                                                                                  |                       | 4S<br>32.5<br>(4,700)            | 4S<br>38.0<br>(5,500)  |
|                                                | 31.8                                     | 1_1/4 |                                                                                                  |                       |                                  | 4S*<br>35.0<br>(5,100) |
| Warranty                                       | Minimum Number of<br>Impulse test Cycles |       | 400,000 cycles                                                                                   |                       | 500,000 cycles (※200,000 cycles) |                        |
|                                                | Period                                   |       | 1 Year                                                                                           |                       |                                  |                        |
| Impulse Test Pressure                          |                                          |       | 133% of Maximum working pressure                                                                 |                       |                                  |                        |
| Minimum Burst Pressure                         |                                          |       | 4 × Maximum working pressure                                                                     |                       |                                  |                        |
| Operating Temperature                          |                                          |       | SC : - 40℃～+100℃ (+32° F～+212° F)<br>EXS-4S : - 40℃～+120℃ (+32° F～+248° F)                       |                       |                                  |                        |
| Application                                    |                                          |       | General hydraulic Oil (Construction machine and other industrial machine), Mineral hydraulic oil |                       |                                  |                        |
| Features                                       |                                          |       | Easy assembly design with excellent adaptability to general metal fittings                       |                       |                                  |                        |

DIB SERIES

Main application

Construction Machine, Agricultural Machine, Industrial Equipment, Machining Tool and various Hydraulic System.

Features

- Good Anti-aging performance,Long impluse pressure life
- Flexibility
- Econimic and enviromental
- Easy to select the fittings
- Working pressure 4.0Mpa~40.0Mpa.Diameter 6mm~51mm.use the same fittings, reduce the Stock.
- No need skiving for SN, SC

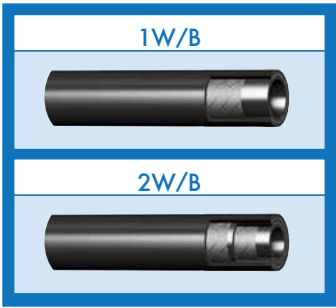
standrad : DIN EN853  
Packing : Cardboard Box

DIB SERIES

|                       |                                                             |
|-----------------------|-------------------------------------------------------------|
| Hose Structure        | INNER COVER :<br>OIL RESISTANT SYNTHETIC RUBBER             |
|                       | REINFORCEMENT : STEEL WIRE                                  |
|                       | OUTER COVER :<br>Oil and Weather Resistant Synthetic Rubber |
| Recommended Fluids    | Mineral Hydraulic Oil                                       |
| Operating Temperature | -40℃ ~ +100℃                                                |

Hose Layline Color: Green (Over -31)  
White (up to -25)

Hose Structure & Reinforcement



| DIB-1SN |      |      |      |      |          |      |          |      |          |     |        |       |
|---------|------|------|------|------|----------|------|----------|------|----------|-----|--------|-------|
|         | I.D. |      | O.D. |      | Max.W.P. |      | Min.B.P. |      | Min.B.R. |     | Weight |       |
|         | inch | mm   | inch | mm   | psi      | MPa  | psi      | MPa  | inch     | mm  | lbs/ft | g/m   |
| -6      | 0.26 | 6.6  | 0.53 | 13.5 | 3,250    | 22.5 | 13,000   | 90.0 | 2.36     | 60  | 0.16   | 230   |
| -8      | 0.32 | 8.1  | 0.59 | 15.0 | 3,120    | 21.5 | 12,480   | 86.0 | 2.56     | 65  | 0.18   | 270   |
| -10     | 0.39 | 10.0 | 0.67 | 17.1 | 2,600    | 18.0 | 10,400   | 72.0 | 2.76     | 70  | 0.22   | 325   |
| -12     | 0.51 | 13.0 | 0.80 | 20.4 | 2,320    | 16.0 | 9,280    | 64.0 | 3.15     | 80  | 0.28   | 420   |
| -16     | 0.63 | 15.9 | 0.94 | 23.8 | 1,880    | 13.0 | 7,520    | 52.0 | 4.33     | 110 | 0.34   | 500   |
| -19     | 0.75 | 19.0 | 1.08 | 27.5 | 1,520    | 10.5 | 6,080    | 42.0 | 5.12     | 130 | 0.44   | 655   |
| -25     | 1.00 | 25.4 | 1.41 | 35.9 | 1,280    | 8.8  | 5,120    | 35.2 | 6.69     | 170 | 0.56   | 830   |
| -31     | 1.25 | 31.8 | 1.70 | 43.1 | 920      | 6.3  | 3,680    | 25.2 | 8.27     | 210 | 0.80   | 1,180 |
| -38     | 1.50 | 38.1 | 1.98 | 50.2 | 725      | 5.0  | 2,900    | 20.0 | 9.45     | 240 | 0.98   | 1,455 |
| -51     | 2.00 | 50.8 | 2.50 | 63.5 | 580      | 4.0  | 2,320    | 16.0 | 12.20    | 310 | 1.36   | 2,015 |

| DIB-2SN |      |      |      |      |          |      |          |       |          |     |        |       |
|---------|------|------|------|------|----------|------|----------|-------|----------|-----|--------|-------|
|         | I.D. |      | O.D. |      | Max.W.P. |      | Min.B.P. |       | Min.B.R. |     | Weight |       |
|         | inch | mm   | inch | mm   | psi      | MPa  | psi      | MPa   | inch     | mm  | lbs/ft | g/m   |
| -6      | 0.26 | 6.6  | 0.59 | 14.9 | 5,800    | 40.0 | 23,200   | 160.0 | 3.15     | 80  | 0.25   | 365   |
| -8      | 0.32 | 8.1  | 0.65 | 16.6 | 5,100    | 35.0 | 20,400   | 140.0 | 3.54     | 90  | 0.29   | 435   |
| -10     | 0.39 | 10.0 | 0.74 | 18.7 | 4,780    | 33.0 | 19,120   | 132.0 | 3.94     | 100 | 0.36   | 535   |
| -12     | 0.51 | 13.0 | 0.85 | 21.7 | 4,000    | 27.5 | 16,000   | 110.0 | 3.94     | 100 | 0.43   | 630   |
| -16     | 0.63 | 15.9 | 0.98 | 25.0 | 3,620    | 25.0 | 14,480   | 100.0 | 4.72     | 120 | 0.50   | 740   |
| -19     | 0.75 | 19.0 | 1.15 | 29.1 | 3,120    | 21.5 | 12,480   | 86.0  | 5.51     | 140 | 0.62   | 920   |
| -25     | 1.00 | 25.4 | 1.49 | 37.9 | 2,400    | 16.5 | 9,600    | 66.0  | 7.09     | 180 | 0.97   | 1,435 |
| -31     | 1.25 | 31.8 | 1.85 | 46.9 | 1,800    | 12.5 | 7,200    | 50.0  | 8.66     | 220 | 1.30   | 1,915 |
| -38     | 1.50 | 38.1 | 2.12 | 53.9 | 1,300    | 9.0  | 5,200    | 36.0  | 10.24    | 260 | 1.53   | 2,255 |
| -51     | 2.00 | 50.8 | 2.62 | 66.6 | 1,150    | 8.0  | 4,600    | 32.0  | 12.60    | 320 | 2.00   | 2,960 |

| DIB-1SC | I.D. |      | O.D. |      | Max.W.P. |      | Min.B.P. |      | Min.B.R. |    | Weight |     |
|---------|------|------|------|------|----------|------|----------|------|----------|----|--------|-----|
|         | inch | mm   | inch | mm   | Psi      | MPa  | Psi      | MPa  | inch     | mm | lbs/ft | g/m |
| -6      | 0.23 | 6.6  | 0.49 | 12.5 | 3,250    | 22.5 | 13,000   | 90.0 | 1.97     | 50 | 0.13   | 195 |
| -8      | 0.32 | 8.1  | 0.54 | 13.7 | 3,120    | 21.5 | 12,480   | 86.0 | 2.17     | 55 | 0.14   | 205 |
| -10     | 0.39 | 10.0 | 0.61 | 15.6 | 2,600    | 18.0 | 10,400   | 72.0 | 2.36     | 60 | 0.16   | 240 |
| -12     | 0.51 | 13.0 | 0.75 | 19.0 | 2,320    | 16.0 | 9,280    | 64.0 | 2.76     | 70 | 0.23   | 340 |

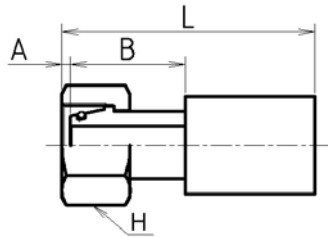
| DIB-2SC | I.D. |      | O.D. |      | Max.W.P. |      | Min.B.P. |       | Min.B.R. |    | Weight |     |
|---------|------|------|------|------|----------|------|----------|-------|----------|----|--------|-----|
|         | inch | mm   | inch | mm   | Psi      | MPa  | Psi      | MPa   | inch     | mm | lbs/ft | g/m |
| -6      | 0.25 | 6.3  | 0.53 | 13.4 | 5,800    | 40.0 | 23,200   | 160.0 | 1.77     | 45 | 0.20   | 290 |
| -8      | 0.32 | 8.1  | 0.59 | 15.0 | 5,100    | 35.0 | 20,400   | 140.0 | 2.17     | 55 | 0.22   | 330 |
| -10     | 0.39 | 10.0 | 0.68 | 17.3 | 4,780    | 33.0 | 19,120   | 132.0 | 2.56     | 65 | 0.30   | 445 |
| -12     | 0.51 | 13.0 | 0.80 | 20.3 | 4,000    | 27.5 | 16,000   | 110.0 | 3.15     | 80 | 0.36   | 535 |

DIB SERIES

DIB Series- 1SN/2SN, 1SC/2SC Fittings

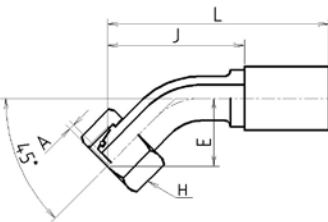
| HOSE ID | SIZE    | H  | L     | A   | B    |
|---------|---------|----|-------|-----|------|
| 6       | M14×1.5 | 17 | 50    | 2   | 19   |
| 8       | M16×1.5 | 19 | 52.5  | 2   | 21   |
| 10      | M18×1.5 | 22 | 52.5  | 1.5 | 21   |
| 12      | M22×1.5 | 27 | 58    | 2.5 | 23.5 |
| 16      | M26×1.5 | 32 | 64.5  | 2.5 | 26   |
| 19      | M30×2   | 36 | 72.5  | 4   | 27.5 |
| 25      | M36×2   | 41 | 81    | 4   | 29   |
| 31      | M45×2   | 50 | 88.8  | 5   | 27   |
| 38      | M52×2   | 60 | 105.5 | 5.5 | 30   |
| 51      | —       | —  | —     | —   | —    |

PART NO.DKOL



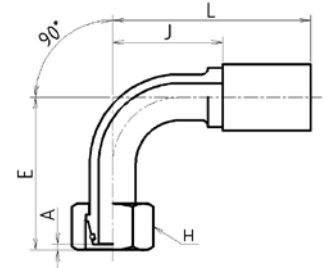
| HOSE ID | SIZE    | H  | L     | J     | E    | A   |
|---------|---------|----|-------|-------|------|-----|
| 6       | M14×1.5 | 17 | 67.6  | 38.6  | 19.3 | 2   |
| 8       | M16×1.5 | 19 | 68.3  | 38.8  | 19.6 | 2   |
| 10      | M18×1.5 | 22 | 74.1  | 44.1  | 22.6 | 1.5 |
| 12      | M22×1.5 | 27 | 84.7  | 52.7  | 26.4 | 2.5 |
| 16      | M26×1.5 | 32 | 99.7  | 63.7  | 30.5 | 2.5 |
| 19      | M30×2   | 36 | 110.7 | 69.7  | 33   | 4   |
| 25      | M36×2   | 41 | 127.5 | 79.5  | 37.1 | 4   |
| 31      | M45×2   | 50 | 152.2 | 95.4  | 42.6 | 5   |
| 38      | M52×2   | 60 | 180.3 | 110.3 | 49.2 | 5.5 |
| 51      | —       | —  | —     | —     | —    | —   |

PART NO.45DKOL



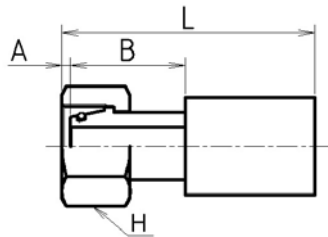
| HOSE ID | SIZE    | H  | L     | J    | E     | A   |
|---------|---------|----|-------|------|-------|-----|
| 6       | M14×1.5 | 17 | 56.5  | 27.5 | 35.5  | 2   |
| 8       | M16×1.5 | 19 | 57.5  | 28   | 36.5  | 2   |
| 10      | M18×1.5 | 22 | 62    | 32   | 42.5  | 1.5 |
| 12      | M22×1.5 | 27 | 71.5  | 39.5 | 50.5  | 2.5 |
| 16      | M26×1.5 | 32 | 85    | 49   | 59    | 2.5 |
| 19      | M30×2   | 36 | 97    | 56   | 66    | 4   |
| 25      | M36×2   | 41 | 115   | 67   | 77    | 4   |
| 31      | M45×2   | 50 | 140.3 | 83.5 | 91    | 5   |
| 38      | M52×2   | 60 | 171   | 101  | 106.5 | 5.5 |
| 51      | —       | —  | —     | —    | —     | —   |

PART NO.90DKOL



| HOSE ID | SIZE    | H  | L    | A   | B    |
|---------|---------|----|------|-----|------|
| 6       | M16×1.5 | 19 | 49.5 | 1.5 | 19   |
| 8       | M18×1.5 | 22 | 50.5 | 1.5 | 19.5 |
| 10      | M20×1.5 | 24 | 51.5 | 1   | 20.5 |
| 12      | M24×1.5 | 30 | 55.5 | 2.5 | 21   |
| 16      | M30×2   | 36 | 69.5 | 3.5 | 30   |
| 19      | M36×2   | 46 | 73.5 | 3.5 | 29   |
| 25      | M42×2   | 50 | 82   | 5   | 29   |
| 31      | M52×2   | 60 | 91.3 | 6.5 | 28   |
| 38      | —       | —  | —    | —   | —    |
| 51      | —       | —  | —    | —   | —    |

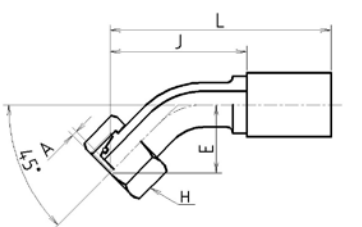
PART NO.DKOS



DIB Series- 1SN/2SN, 1SC/2SC Fittings

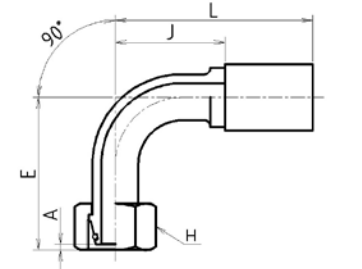
| HOSE ID | SIZE    | H  | L     | J    | E    | A   |
|---------|---------|----|-------|------|------|-----|
| 6       | M16×1.5 | 19 | 68    | 39   | 19.7 | 1.5 |
| 8       | M18×1.5 | 22 | 68.7  | 39.2 | 20   | 1.5 |
| 10      | M20×1.5 | 24 | 74.4  | 44.4 | 23   | 1   |
| 12      | M24×1.5 | 30 | 85.4  | 53.4 | 27.1 | 2.5 |
| 16      | M30×2   | 36 | 101.2 | 65.2 | 32   | 3.5 |
| 19      | M36×2   | 46 | 110.7 | 69.7 | 33   | 3.5 |
| 25      | M42×2   | 50 | 127.5 | 79.5 | 37.1 | 5   |
| 31      | M52×2   | 60 | 153.6 | 96.8 | 44   | 6.5 |
| 38      | —       | —  | —     | —    | —    | —   |
| 51      | —       | —  | —     | —    | —    | —   |

PART NO.45DKOS



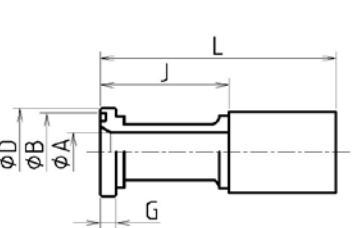
| HOSE ID | SIZE    | H  | L     | J    | E    | A   |
|---------|---------|----|-------|------|------|-----|
| 6       | M16×1.5 | 19 | 56.5  | 27.5 | 36   | 1.5 |
| 8       | M18×1.5 | 22 | 57.5  | 28   | 37   | 1.5 |
| 10      | M20×1.5 | 24 | 62    | 32   | 43   | 1   |
| 12      | M24×1.5 | 30 | 71.5  | 39.5 | 51.5 | 2.5 |
| 16      | M30×2   | 36 | 85    | 49   | 60.5 | 3.5 |
| 19      | M36×2   | 46 | 97    | 56   | 66   | 3.5 |
| 25      | M42×2   | 50 | 115   | 67   | 77   | 5   |
| 31      | M52×2   | 60 | 140.3 | 83.5 | 93   | 6.5 |
| 38      | —       | —  | —     | —    | —    | —   |
| 51      | —       | —  | —     | —    | —    | —   |

PART NO.90DKOS



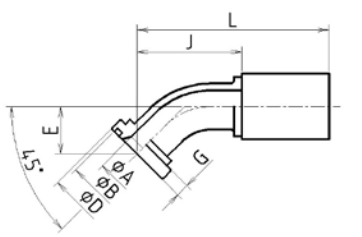
| HOSE ID | SIZE   | D    | G    | L     | J  | A   | B     |
|---------|--------|------|------|-------|----|-----|-------|
| 6       | —      | —    | —    | —     | —  | —   | —     |
| 8       | —      | —    | —    | —     | —  | —   | —     |
| 10      | —      | —    | —    | —     | —  | —   | —     |
| 12      | 1/2"   | 30.2 | 6.73 | 73    | 41 | 9.5 | 25.5  |
| 16      | 3/4"   | 38.1 | 6.73 | 78    | 42 | 12  | 31.8  |
| 19      | 3/4"   | 38.1 | 6.73 | 83    | 42 | 15  | 31.8  |
| 25      | 1"     | 44.4 | 8    | 93    | 45 | 20  | 39.75 |
| 31      | 1.1/4" | 50.8 | 8    | 106.8 | 50 | 26  | 44.51 |
| 38      | 1.1/2" | 60.3 | 8    | 130   | 60 | 32  | 53.84 |
| 51      | 2"     | 71.4 | 9.53 | 134.5 | 62 | 43  | 63.37 |

PART NO.3F



| HOSE ID | SIZE   | E    | D    | G    | L     | J     | A   | B     |
|---------|--------|------|------|------|-------|-------|-----|-------|
| 6       | —      | —    | —    | —    | —     | —     | —   | —     |
| 8       | —      | —    | —    | —    | —     | —     | —   | —     |
| 10      | —      | —    | —    | —    | —     | —     | —   | —     |
| 12      | 1/2"   | 23   | 30.2 | 6.73 | 82.5  | 50.5  | 9.5 | 25.5  |
| 16      | 3/4"   | 25   | 38.1 | 6.73 | 94.5  | 58.5  | 12  | 31.8  |
| 19      | 3/4"   | 28   | 38.1 | 6.73 | 106   | 65    | 15  | 31.8  |
| 25      | 1"     | 29.4 | 44.4 | 8    | 123   | 75    | 20  | 39.75 |
| 31      | 1.1/4" | 33.8 | 50.8 | 8    | 143.3 | 86.5  | 26  | 44.51 |
| 38      | 1.1/2" | 40.4 | 60.3 | 8    | 171.9 | 101.9 | 32  | 53.84 |
| 51      | 2"     | 46.3 | 71.4 | 9.53 | 191.5 | 119   | 43  | 63.37 |

PART NO.453F

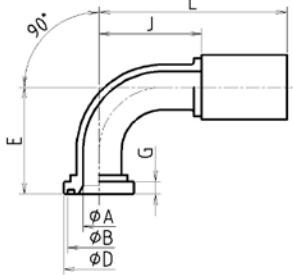


DIB SERIES

DIB Series- 1SN/2SN, 1SC/2SC Fittings

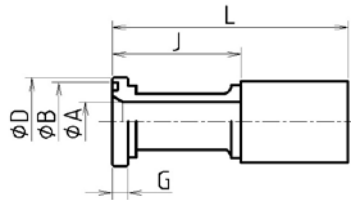
| HOSE ID | SIZE   | E     | D    | G    | L     | J    | A   | B     |
|---------|--------|-------|------|------|-------|------|-----|-------|
| 6       | —      | —     | —    | —    | —     | —    | —   | —     |
| 8       | —      | —     | —    | —    | —     | —    | —   | —     |
| 10      | —      | —     | —    | —    | —     | —    | —   | —     |
| 12      | 1/2"   | 45.5  | 30.2 | 6.73 | 71    | 39   | 9.5 | 25.5  |
| 16      | 3/4"   | 51    | 38.1 | 6.73 | 85    | 49   | 12  | 31.8  |
| 19      | 3/4"   | 59    | 38.1 | 6.73 | 99    | 58   | 15  | 31.8  |
| 25      | 1"     | 66    | 44.4 | 8    | 115   | 67   | 20  | 39.75 |
| 31      | 1.1/4" | 78.5  | 50.8 | 8    | 140.3 | 83.5 | 26  | 44.5  |
| 38      | 1.1/2" | 94    | 60.3 | 8    | 171   | 101  | 32  | 54    |
| 51      | 2"     | 114.5 | 71.4 | 9.53 | 202.5 | 130  | 43  | 63.3  |

PART NO.903F



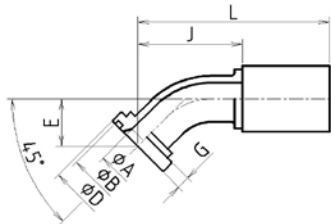
| HOSE ID | SIZE   | D    | G     | L     | J  | A   | B     |
|---------|--------|------|-------|-------|----|-----|-------|
| 6       | —      | —    | —     | —     | —  | —   | —     |
| 8       | —      | —    | —     | —     | —  | —   | —     |
| 10      | —      | —    | —     | —     | —  | —   | —     |
| 12      | 1/2"   | 31.7 | 7.75  | 74    | 42 | 9.5 | 25.5  |
| 16      | 3/4"   | 41.3 | 8.76  | 81    | 45 | 12  | 31.8  |
| 19      | 3/4"   | 41.3 | 8.76  | 86    | 45 | 15  | 31.8  |
| 25      | 1"     | 47.6 | 9.53  | 98    | 50 | 20  | 39.75 |
| 31      | 1.1/4" | 54   | 10.29 | 114.8 | 58 | 26  | 44.51 |
| 38      | 1.1/2" | 63.5 | 12.57 | 137   | 67 | 32  | 53.84 |
| 51      | 2"     | 79.4 | 12.57 | 149.5 | 77 | 43  | 63.37 |

PART NO.6F



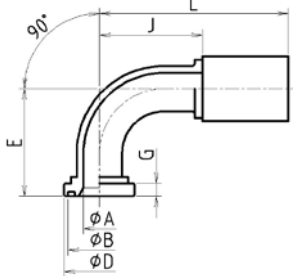
| HOSE ID | SIZE   | E    | D    | G     | L     | J    | A   | B     |
|---------|--------|------|------|-------|-------|------|-----|-------|
| 6       | —      | —    | —    | —     | —     | —    | —   | —     |
| 8       | —      | —    | —    | —     | —     | —    | —   | —     |
| 10      | —      | —    | —    | —     | —     | —    | —   | —     |
| 12      | 1/2"   | 25.1 | 31.7 | 7.75  | 85    | 53   | 9.5 | 25.5  |
| 16      | 3/4"   | 27.8 | 41.3 | 8.76  | 97    | 61   | 12  | 31.8  |
| 19      | 3/4"   | 30.5 | 41.3 | 8.76  | 108.5 | 67.5 | 15  | 31.8  |
| 25      | 1"     | 34.4 | 47.6 | 9.53  | 128   | 80   | 20  | 39.75 |
| 31      | 1.1/4" | 41.5 | 54   | 10.29 | 151.8 | 95   | 26  | 44.5  |
| 38      | 1.1/2" | 50.3 | 63.5 | 12.57 | 182   | 112  | 32  | 54    |
| 51      | 2"     | 62   | 79.4 | 12.57 | 207.5 | 135  | 43  | 63.3  |

PART NO.456F



| HOSE ID | SIZE   | E    | D    | G     | L     | J    | A   | B     |
|---------|--------|------|------|-------|-------|------|-----|-------|
| 6       | —      | —    | —    | —     | —     | —    | —   | —     |
| 8       | —      | —    | —    | —     | —     | —    | —   | —     |
| 10      | —      | —    | —    | —     | —     | —    | —   | —     |
| 12      | 1/2"   | 48.5 | 31.7 | 7.75  | 71    | 39   | 9.5 | 25.5  |
| 16      | 3/4"   | 55   | 41.3 | 8.76  | 85    | 49   | 12  | 31.8  |
| 19      | 3/4"   | 63   | 41.3 | 8.76  | 98    | 57   | 15  | 31.8  |
| 25      | 1"     | 73   | 47.6 | 9.53  | 115   | 67   | 20  | 39.75 |
| 31      | 1.1/4" | 89.5 | 54   | 10.29 | 140.3 | 83.5 | 26  | 44.51 |
| 38      | 1.1/2" | 108  | 63.5 | 12.57 | 171   | 101  | 32  | 53.84 |
| 51      | 2"     | 137  | 79.4 | 12.57 | 202.5 | 130  | 43  | 63.37 |

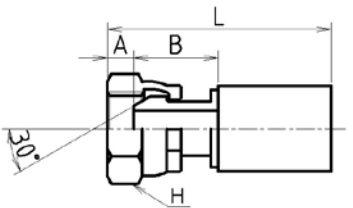
PART NO.906F



DIB Series- 1SN/2SN, 1SC/2SC Fittings

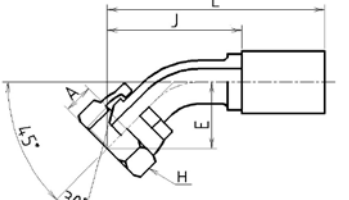
| HOSE ID | SIZE        | H  | L     | A    | B    |
|---------|-------------|----|-------|------|------|
| 6       | G1/4" ×19   | 19 | 48.8  | 5.3  | 14.5 |
| 8       | G3/8" ×19   | 22 | 50    | 5.5  | 15   |
| 10      | G3/8" ×19   | 22 | 50.5  | 5.5  | 15   |
| 12      | G1/2" ×14   | 27 | 55.5  | 6.5  | 17   |
| 16      | G5/8" ×14   | 30 | 62.5  | 9.5  | 17   |
| 19      | G3/4" ×14   | 32 | 67.9  | 8.9  | 18   |
| 25      | G1" ×11     | 41 | 77.5  | 10.5 | 19   |
| 31      | G1.1/4" ×11 | 50 | 90.3  | 10   | 23.5 |
| 38      | G1.1/2" ×11 | 55 | 106.5 | 12.5 | 24   |
| 51      | G2" ×11     | 70 | 114.5 | 16   | 26   |

PART NO.5



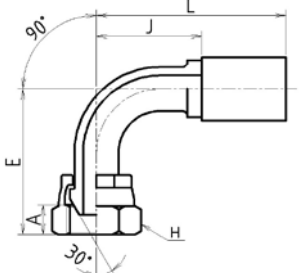
| HOSE ID | SIZE        | H  | L     | J     | A    | E    |
|---------|-------------|----|-------|-------|------|------|
| 6       | G1/4" ×19   | 19 | 70.6  | 41.6  | 5.3  | 22.3 |
| 8       | G3/8" ×19   | 22 | 71.8  | 42.3  | 5.5  | 22.1 |
| 10      | G3/8" ×19   | 22 | 76.9  | 46.9  | 5.5  | 25.4 |
| 12      | G1/2" ×14   | 27 | 88.6  | 56.6  | 6.5  | 30.3 |
| 16      | G5/8" ×14   | 30 | 103.6 | 67.6  | 9.5  | 34.4 |
| 19      | G3/4" ×14   | 32 | 114.5 | 73.5  | 8.9  | 36.8 |
| 25      | G1" ×11     | 41 | 131.7 | 83.7  | 10.5 | 41.3 |
| 31      | G1.1/4" ×11 | 50 | 156.6 | 99.8  | 10   | 47.3 |
| 38      | G1.1/2" ×11 | 55 | 189   | 119   | 12.5 | 55.9 |
| 51      | G2" ×11     | 70 | 212   | 139.5 | 16   | 67.5 |

PART NO.455



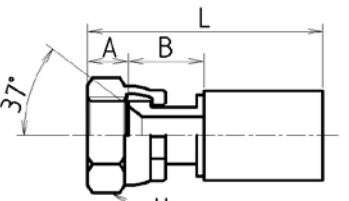
| HOSE ID | SIZE        | H  | L     | J    | A    | E     |
|---------|-------------|----|-------|------|------|-------|
| 6       | G1/4" ×19   | 19 | 56.5  | 27.5 | 5.3  | 39.3  |
| 8       | G3/8" ×19   | 22 | 57.5  | 28   | 5.5  | 41.5  |
| 10      | G3/8" ×19   | 22 | 62    | 32   | 5.5  | 46.5  |
| 12      | G1/2" ×14   | 27 | 71.5  | 39.5 | 6.5  | 56.5  |
| 16      | G5/8" ×14   | 30 | 85    | 49   | 9.5  | 64.5  |
| 19      | G3/4" ×14   | 32 | 97    | 56   | 8.9  | 70.9  |
| 25      | G1" ×11     | 41 | 115   | 67   | 10.5 | 82.5  |
| 31      | G1.1/4" ×11 | 50 | 140.3 | 83.5 | 10   | 100   |
| 38      | G1.1/2" ×11 | 55 | 170   | 100  | 12.5 | 117.5 |
| 51      | G2" ×11     | 70 | 193.5 | 121  | 16   | 144.5 |

PART NO.905



| HOSE ID | SIZE        | H  | L     | A    | B    |
|---------|-------------|----|-------|------|------|
| 6       | 7/16" ×20   | 14 | 48.5  | 9    | 10.5 |
| 8       | 1/2" ×20    | 17 | 50    | 9.5  | 11   |
| 10      | 9/16" ×18   | 19 | 51.5  | 9.5  | 12   |
| 12      | 3/4" ×16    | 24 | 56    | 11   | 13   |
| 16      | 7/8" ×14    | 27 | 63    | 13   | 14   |
| 19      | 1.1/16" ×12 | 32 | 71.5  | 15   | 15.5 |
| 25      | 1.5/16" ×12 | 41 | 79.5  | 15.5 | 16   |
| 31      | 1.5/8" ×12  | 50 | 90.8  | 16   | 18   |
| 38      | 1.7/8" ×12  | 55 | 108.5 | 19   | 19.5 |
| 51      | 2.1/2" ×12  | 75 | 115   | 23.5 | 19   |

PART NO.4U

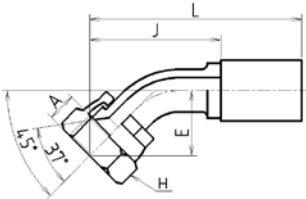


# DHD SERIES

## DIB Series- 1SN/2SN, 1SC/2SC Fittings

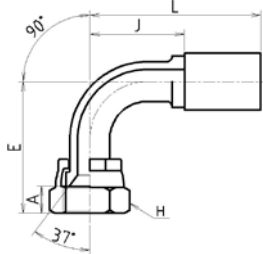
| HOSE ID | SIZE        | H  | L     | J     | A    | E    |
|---------|-------------|----|-------|-------|------|------|
| 6       | 7/16" ×20   | 14 | 70.8  | 41.8  | 9    | 22.5 |
| 8       | 1/2" ×20    | 17 | 71.8  | 42.3  | 9.5  | 23.1 |
| 10      | 9/16" ×18   | 19 | 77.9  | 47.9  | 9.5  | 26.5 |
| 12      | 3/4" ×16    | 22 | 89.7  | 57.7  | 11   | 31.3 |
| 16      | 7/8" ×14    | 27 | 103.6 | 67.6  | 13   | 34.4 |
| 19      | 1.1/16" ×12 | 32 | 117   | 76    | 15   | 39.4 |
| 25      | 1.5/16" ×12 | 41 | 113.5 | 85.5  | 15.5 | 43.1 |
| 31      | 1.5/8" ×12  | 50 | 158.9 | 102.1 | 16   | 49.3 |
| 38      | 1.7/8" ×12  | 55 | 190.4 | 120.4 | 19   | 57.3 |
| 51      | 2.1/2" ×12  | 75 | 217.4 | 144.9 | 23.5 | 67.9 |

PART NO.454U



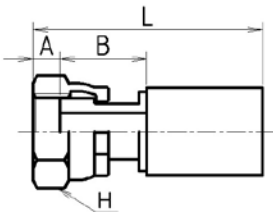
| HOSE ID | SIZE        | H  | L     | J    | A    | E     |
|---------|-------------|----|-------|------|------|-------|
| 6       | 7/16" ×20   | 14 | 54.5  | 25.5 | 9    | 38    |
| 8       | 1/2" ×20    | 17 | 57.5  | 28   | 9.5  | 41.5  |
| 10      | 9/16" ×18   | 19 | 62    | 32   | 9.5  | 48    |
| 12      | 3/4" ×16    | 24 | 71    | 39   | 11   | 57.5  |
| 16      | 7/8" ×14    | 27 | 86    | 50   | 13   | 64.5  |
| 19      | 1.1/16" ×12 | 32 | 97    | 56   | 14.5 | 74.5  |
| 25      | 1.5/16" ×12 | 41 | 115   | 67   | 15.5 | 85.5  |
| 31      | 1.5/8" ×12  | 50 | 140.3 | 83.5 | 16   | 100.5 |
| 38      | 1.7/8" ×12  | 55 | 171   | 101  | 19   | 119   |
| 51      | 2.1/2" ×12  | 75 | 193.5 | 121  | 23.5 | 145   |

PART NO.904U



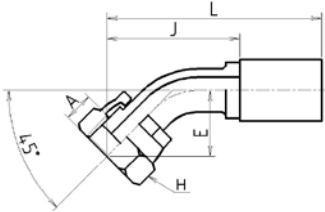
| HOSE ID | SIZE        | H  | L     | A    | B    |
|---------|-------------|----|-------|------|------|
| 6       | 9/16" ×18   | 19 | 55.5  | 8.5  | 18   |
| 8       | 11/16" ×16  | 22 | 58.5  | 10   | 19   |
| 10      | 11/16" ×16  | 22 | 60.5  | 9    | 21.5 |
| 12      | 13/16" ×16  | 27 | 66.5  | 11   | 23.5 |
| 16      | 1" ×14      | 30 | 77    | 13.5 | 27.5 |
| 19      | 1.3/16" ×12 | 36 | 85    | 15   | 29   |
| 25      | 1.7/16" ×12 | 41 | 94    | 15   | 31   |
| 31      | 2" ×12      | 60 | 85.3  | 28.5 | 14.8 |
| 38      | 2" ×12      | 60 | 113.3 | 14.8 | 28.5 |
| 51      | —           | —  | —     | —    | —    |

PART NO.KO



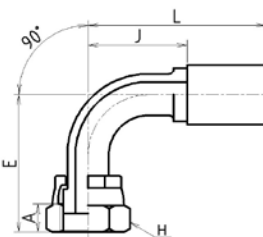
| HOSE ID | SIZE        | H  | L     | J     | A    | E    |
|---------|-------------|----|-------|-------|------|------|
| 6       | 9/16" ×18   | 19 | 75.3  | 46.3  | 8.5  | 27   |
| 8       | 11/16" ×16  | 22 | 70.8  | 41.3  | 9    | 22.1 |
| 10      | 11/16" ×16  | 22 | 84.3  | 54.3  | 10   | 32.8 |
| 12      | 13/16" ×16  | 27 | 96.4  | 64.4  | 11   | 38.1 |
| 16      | 1" ×14      | 30 | 113.5 | 77.5  | 13.5 | 44.3 |
| 19      | 1.3/16" ×12 | 36 | 126.2 | 85.2  | 15   | 48.6 |
| 25      | 1.7/16" ×12 | 41 | 143   | 95    | 15   | 52.6 |
| 31      | 2" ×12      | 60 | 145   | 88    | 13.8 | 44.9 |
| 38      | 2" ×12      | 60 | 181.2 | 111.2 | 14.8 | 50.1 |
| 51      | —           | —  | —     | —     | —    | —    |

PART NO.45KO



| HOSE ID | SIZE        | H  | L     | J    | A    | E     |
|---------|-------------|----|-------|------|------|-------|
| 6       | 9/16" ×18   | 19 | 54.5  | 25.5 | 8.5  | 44.5  |
| 8       | 11/16" ×16  | 22 | 58    | 28.5 | 10   | 45    |
| 10      | 11/16" ×16  | 22 | 62    | 32   | 10   | 58    |
| 12      | 13/16" ×16  | 27 | 70.5  | 38.5 | 11   | 67    |
| 16      | 1" ×14      | 30 | 85    | 49   | 13.5 | 78.5  |
| 19      | 1.3/16" ×12 | 36 | 99    | 58   | 15   | 90    |
| 25      | 1.7/16" ×12 | 41 | 115   | 67   | 15   | 97    |
| 31      | 2" ×12      | 50 | 140.3 | 83.5 | 13.8 | 94.3  |
| 38      | 2" ×12      | 60 | 171   | 101  | 14.8 | 107.8 |
| 51      | —           | —  | —     | —    | —    | —     |

PART NO.90KO



# HYDRAULIC HOSES

ADVANSTAR★



Reliable  
High-End  
Japan  
Technology

Ultra  
Durable

Super  
Soft

Super  
Handy

## DHD SERIES

### Main application

Construction Machine, Agricultural Machine, Industrial Equipment, Machining Tool and various Hydraulic System.

### Features

- Good Anti-aging performance, Long impulse pressure life
- Exceed DIN standard design, Flexibility performance
- Economic and environmental
- Easy to select the fittings
- high pressure large diameter series
- No need skiving for 4SP, 4SH

standard : DIN EN856

Packing : Cardboard Box

|                       |                                                             |
|-----------------------|-------------------------------------------------------------|
| Hose Structure        | INNER COVER :<br>OIL RESISTANT SYNTHETIC RUBBER             |
|                       | REINFORCEMENT : STEEL WIRE                                  |
|                       | OUTER COVER :<br>Oil and Weather Resistant Synthetic Rubber |
| Recommended Fluids    | Mineral Hydraulic Oil                                       |
| Operating Temperature | -40℃ ~ +120℃                                                |

### Hose Layline Color : Blue

#### Hose Structure & Reinforcement



| DHD-4SP |  |      |  |      |  |      |  |       |  |     |  |       |
|---------|-------------------------------------------------------------------------------------|------|-------------------------------------------------------------------------------------|------|-------------------------------------------------------------------------------------|------|-------------------------------------------------------------------------------------|-------|-------------------------------------------------------------------------------------|-----|-------------------------------------------------------------------------------------|-------|
|         | I.D.                                                                                |      | O.D.                                                                                |      | Max.W.P.                                                                            |      | Min.B.P.                                                                            |       | Min.B.R.                                                                            |     | Weight                                                                              |       |
|         | inch                                                                                | mm   | inch                                                                                | mm   | Psi                                                                                 | MPa  | Psi                                                                                 | MPa   | inch                                                                                | mm  | lbs/ft                                                                              | g/m   |
| -10     | 0.37                                                                                | 9.5  | 0.84                                                                                | 21.3 | 6,000                                                                               | 44.5 | 24,000                                                                              | 178.0 | 5.12                                                                                | 130 | 0.44                                                                                | 645   |
| -12     | 0.51                                                                                | 12.9 | 0.96                                                                                | 24.4 | 6,000                                                                               | 41.5 | 24,000                                                                              | 166.0 | 5.51                                                                                | 140 | 0.49                                                                                | 730   |
| -16     | 0.63                                                                                | 16.0 | 1.10                                                                                | 28.0 | 5,500                                                                               | 38.0 | 22,000                                                                              | 152.0 | 6.30                                                                                | 160 | 0.69                                                                                | 1,025 |
| -19     | 0.76                                                                                | 19.2 | 1.25                                                                                | 31.8 | 5,500                                                                               | 38.0 | 22,000                                                                              | 152.0 | 7.87                                                                                | 200 | 0.98                                                                                | 1,450 |
| -25     | 1.00                                                                                | 25.4 | 1.55                                                                                | 39.4 | 4,650                                                                               | 32.5 | 18,600                                                                              | 130.0 | 9.06                                                                                | 230 | 1.32                                                                                | 1,945 |

| DHD-4SH |  |      |  |      |  |      |  |       |  |     |  |       |
|---------|-------------------------------------------------------------------------------------|------|-------------------------------------------------------------------------------------|------|-------------------------------------------------------------------------------------|------|-------------------------------------------------------------------------------------|-------|-------------------------------------------------------------------------------------|-----|-------------------------------------------------------------------------------------|-------|
|         | I.D.                                                                                |      | O.D.                                                                                |      | Max.W.P.                                                                            |      | Min.B.P.                                                                            |       | Min.B.R.                                                                            |     | Weight                                                                              |       |
|         | inch                                                                                | mm   | inch                                                                                | mm   | Psi                                                                                 | MPa  | Psi                                                                                 | MPa   | inch                                                                                | mm  | lbs/ft                                                                              | g/m   |
| -19     | 0.76                                                                                | 19.2 | 1.25                                                                                | 31.8 | 6,000                                                                               | 42.0 | 24,000                                                                              | 168.0 | 9.06                                                                                | 230 | 0.98                                                                                | 1,450 |
| -25     | 1.00                                                                                | 25.4 | 1.53                                                                                | 38.8 | 5,500                                                                               | 38.0 | 22,000                                                                              | 152.0 | 9.45                                                                                | 240 | 1.36                                                                                | 2,010 |
| -31     | 1.25                                                                                | 31.8 | 1.80                                                                                | 45.7 | 4,500                                                                               | 32.5 | 18,000                                                                              | 130.0 | 9.84                                                                                | 250 | 1.74                                                                                | 2,565 |
| -38     | 1.50                                                                                | 38.1 | 2.09                                                                                | 53.0 | 4,200                                                                               | 29.0 | 16,800                                                                              | 116.0 | 12.20                                                                               | 310 | 2.12                                                                                | 3,130 |
| -51     | 2.00                                                                                | 50.8 | 2.67                                                                                | 67.8 | 3,620                                                                               | 25.0 | 14,480                                                                              | 100.0 | 17.72                                                                               | 450 | 3.37                                                                                | 4,975 |

| EXS-4SP |  |      |  |      |  |      |  |     |  |     |  |       |
|---------|---------------------------------------------------------------------------------------|------|---------------------------------------------------------------------------------------|------|---------------------------------------------------------------------------------------|------|---------------------------------------------------------------------------------------|-----|---------------------------------------------------------------------------------------|-----|---------------------------------------------------------------------------------------|-------|
|         | I.D.                                                                                  |      | O.D.                                                                                  |      | Max.W.P.                                                                              |      | Min.B.P.                                                                              |     | Min.B.R.                                                                              |     | Weight                                                                                |       |
|         | inch                                                                                  | mm   | inch                                                                                  | mm   | Psi                                                                                   | MPa  | Psi                                                                                   | MPa | inch                                                                                  | mm  | lbs/ft                                                                                | g/m   |
| -12     | 0.51                                                                                  | 12.9 | 0.90                                                                                  | 22.9 | 6,100                                                                                 | 42.0 | 24,400                                                                                | 168 | 5.31                                                                                  | 135 | 0.51                                                                                  | 750   |
| -16     | 0.63                                                                                  | 16.0 | 1.05                                                                                  | 26.6 | 5,500                                                                                 | 38.0 | 22,000                                                                                | 152 | 6.30                                                                                  | 160 | 0.70                                                                                  | 1,030 |
| -19     | 0.76                                                                                  | 19.2 | 1.19                                                                                  | 30.1 | 5,500                                                                                 | 38.0 | 22,000                                                                                | 152 | 7.87                                                                                  | 200 | 0.90                                                                                  | 1,325 |
| -25     | 1.00                                                                                  | 25.4 | 1.46                                                                                  | 37.1 | 4,500                                                                                 | 32.5 | 18,000                                                                                | 130 | 9.06                                                                                  | 230 | 1.18                                                                                  | 1,750 |

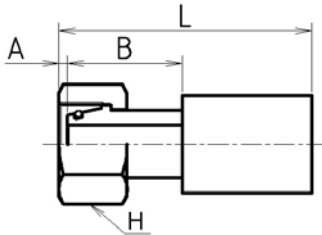
| EXS-4SH |  |      |  |      |  |      |  |     |  |     |  |       |
|---------|---------------------------------------------------------------------------------------|------|---------------------------------------------------------------------------------------|------|---------------------------------------------------------------------------------------|------|---------------------------------------------------------------------------------------|-----|---------------------------------------------------------------------------------------|-----|---------------------------------------------------------------------------------------|-------|
|         | I.D.                                                                                  |      | O.D.                                                                                  |      | Max.W.P.                                                                              |      | Min.B.P.                                                                              |     | Min.B.R.                                                                              |     | Weight                                                                                |       |
|         | inch                                                                                  | mm   | inch                                                                                  | mm   | Psi                                                                                   | MPa  | Psi                                                                                   | MPa | inch                                                                                  | mm  | lbs/ft                                                                                | g/m   |
| -25     | 1.00                                                                                  | 25.4 | 1.48                                                                                  | 37.6 | 5,500                                                                                 | 38.0 | 22,000                                                                                | 152 | 9.45                                                                                  | 240 | 1.29                                                                                  | 1,910 |
| -31     | 1.25                                                                                  | 31.8 | 1.80                                                                                  | 45.7 | 5,100                                                                                 | 35.0 | 20,400                                                                                | 140 | 9.84                                                                                  | 250 | 1.74                                                                                  | 2,565 |

# DHD Series

## DHD Series- 4SP/4SH Fittings

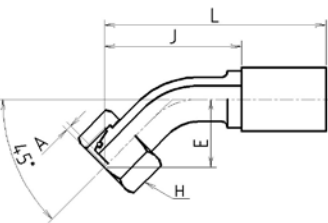
| HOSE ID | SIZE    | H  | L     | A   | B    |
|---------|---------|----|-------|-----|------|
| 6       | M14×1.5 | 17 | 50    | 2   | 19   |
| 8       | M16×1.5 | 19 | 52.5  | 2   | 21   |
| 10      | M18×1.5 | 22 | 52.5  | 1.5 | 21   |
| 12      | M22×1.5 | 27 | 58    | 2.5 | 23.5 |
| 16      | M26×1.5 | 32 | 64.5  | 2.5 | 26   |
| 19      | M30×2   | 36 | 72.5  | 4   | 27.5 |
| 25      | M36×2   | 41 | 81    | 4   | 29   |
| 31      | M45×2   | 50 | 88.8  | 5   | 27   |
| 38      | M52×2   | 60 | 105.5 | 5.5 | 30   |
| 51      | —       | —  | —     | —   | —    |

PART NO.DKOL



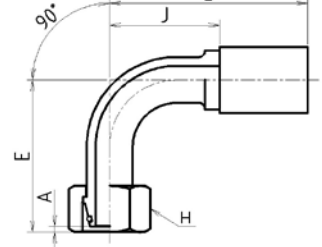
| HOSE ID | SIZE    | H  | L     | J     | E    | A   |
|---------|---------|----|-------|-------|------|-----|
| 6       | M14×1.5 | 17 | 67.6  | 38.6  | 19.3 | 2   |
| 8       | M16×1.5 | 19 | 68.3  | 38.8  | 19.6 | 2   |
| 10      | M18×1.5 | 22 | 74.1  | 44.1  | 22.6 | 1.5 |
| 12      | M22×1.5 | 27 | 84.7  | 52.7  | 26.4 | 2.5 |
| 16      | M26×1.5 | 32 | 99.7  | 63.7  | 30.5 | 2.5 |
| 19      | M30×2   | 36 | 110.7 | 69.7  | 33   | 4   |
| 25      | M36×2   | 41 | 127.5 | 79.5  | 37.1 | 4   |
| 31      | M45×2   | 50 | 152.2 | 95.4  | 42.6 | 5   |
| 38      | M52×2   | 60 | 180.3 | 110.3 | 49.2 | 5.5 |
| 51      | —       | —  | —     | —     | —    | —   |

PART NO.45DKOL



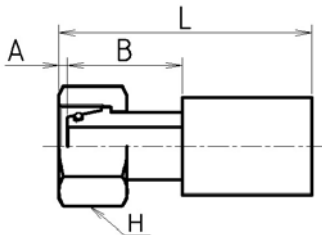
| HOSE ID | SIZE    | H  | L     | J    | E     | A   |
|---------|---------|----|-------|------|-------|-----|
| 6       | M14×1.5 | 17 | 56.5  | 27.5 | 35.5  | 2   |
| 8       | M16×1.5 | 19 | 57.5  | 28   | 36.5  | 2   |
| 10      | M18×1.5 | 22 | 62    | 32   | 42.5  | 1.5 |
| 12      | M22×1.5 | 27 | 71.5  | 39.5 | 50.5  | 2.5 |
| 16      | M26×1.5 | 32 | 85    | 49   | 59    | 2.5 |
| 19      | M30×2   | 36 | 97    | 56   | 66    | 4   |
| 25      | M36×2   | 41 | 115   | 67   | 77    | 4   |
| 31      | M45×2   | 50 | 140.3 | 83.5 | 91    | 5   |
| 38      | M52×2   | 60 | 171   | 101  | 106.5 | 5.5 |
| 51      | —       | —  | —     | —    | —     | —   |

PART NO.90DKOL



| HOSE ID | SIZE    | H  | L    | A   | B    |
|---------|---------|----|------|-----|------|
| 6       | M16×1.5 | 19 | 50   | 1.5 | 19.5 |
| 8       | M18×1.5 | 22 | 51   | 1   | 20.5 |
| 10      | M20×1.5 | 24 | 56.5 | 2.5 | 24   |
| 12      | M24×1.5 | 30 | 60   | 3   | 25   |
| 16      | M30×1.5 | 36 | 69.5 | 3.5 | 30   |
| 19      | M36×1.5 | 46 | 72   | 5   | 26   |
| 25      | M42×1.5 | 50 | 82   | 5   | 29   |
| 31      | M52×1.5 | 60 | 91.3 | 6.5 | 28   |
| 38      | —       | —  | —    | —   | —    |
| 51      | —       | —  | —    | —   | —    |

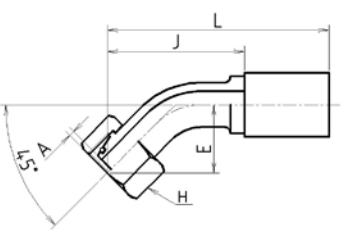
PART NO.DKOS



## DHD Series- 4SP/4SH Fittings

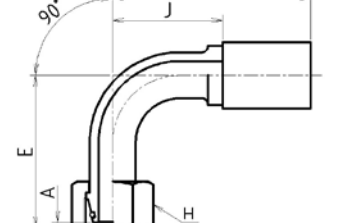
| HOSE ID | SIZE    | H  | L     | J    | E    | A   |
|---------|---------|----|-------|------|------|-----|
| 6       | M16×1.5 | 19 | 68    | 39   | 19.7 | 1.5 |
| 8       | M18×1.5 | 22 | 69.4  | 39.9 | 20.7 | 1   |
| 10      | M20×1.5 | 24 | 77.2  | 47.2 | 25.8 | 2.5 |
| 12      | M24×1.5 | 30 | 88.1  | 56.1 | 28.6 | 3   |
| 16      | M30×2   | 36 | 101.2 | 65.2 | 32   | 3.5 |
| 19      | M36×2   | 46 | 112.1 | 71.1 | 34.4 | 5   |
| 25      | M42×2   | 50 | 132.5 | 84.5 | 38.6 | 5   |
| 31      | M52×2   | 60 | 153.6 | 96.8 | 44   | 6.5 |
| 38      | —       | —  | —     | —    | —    | —   |
| 51      | —       | —  | —     | —    | —    | —   |

PART NO.45DKOS



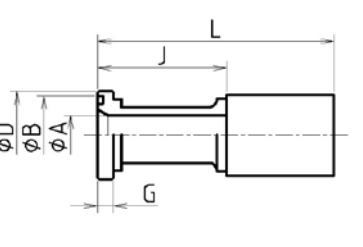
| HOSE ID | SIZE    | H  | L     | J    | E    | A   |
|---------|---------|----|-------|------|------|-----|
| 6       | M16×1.5 | 19 | 56.5  | 27.5 | 36   | 1.5 |
| 8       | M18×1.5 | 22 | 57.5  | 28   | 38   | 1   |
| 10      | M20×1.5 | 24 | 62    | 32   | 46.5 | 2.5 |
| 12      | M24×1.5 | 30 | 70.5  | 38.5 | 53.5 | 3   |
| 16      | M30×2   | 36 | 85    | 49   | 60.5 | 3.5 |
| 19      | M36×2   | 46 | 97    | 56   | 68   | 5   |
| 25      | M42×2   | 50 | 115   | 67   | 79   | 5   |
| 31      | M52×2   | 60 | 140.3 | 83.5 | 93   | 6.5 |
| 38      | —       | —  | —     | —    | —    | —   |
| 51      | —       | —  | —     | —    | —    | —   |

PART NO.90DKOS



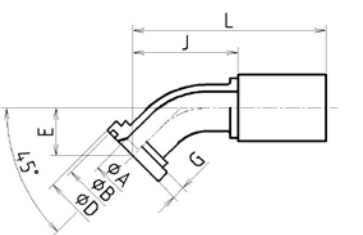
| HOSE ID | SIZE   | D    | G    | L     | J  | A   | B     |
|---------|--------|------|------|-------|----|-----|-------|
| 6       | —      | —    | —    | —     | —  | —   | —     |
| 8       | —      | —    | —    | —     | —  | —   | —     |
| 10      | —      | —    | —    | —     | —  | —   | —     |
| 12      | 1/2"   | 30.2 | 6.73 | 73    | 41 | 9.5 | 25.5  |
| 16      | 3/4"   | 38.1 | 6.73 | 78    | 42 | 12  | 31.8  |
| 19      | 3/4"   | 38.1 | 6.73 | 83    | 42 | 15  | 31.8  |
| 25      | 1"     | 44.4 | 8    | 93    | 45 | 20  | 39.75 |
| 31      | 1.1/4" | 50.8 | 8    | 106.8 | 50 | 26  | 44.5  |
| 38      | 1.1/2" | 60.3 | 8    | 130   | 60 | 32  | 54    |
| 51      | 2"     | 71.4 | 9.53 | 134.5 | 62 | 43  | 63.3  |

PART NO.3F



| HOSE ID | SIZE   | E    | D    | G    | L     | J     | A   | B     |
|---------|--------|------|------|------|-------|-------|-----|-------|
| 6       | —      | —    | —    | —    | —     | —     | —   | —     |
| 8       | —      | —    | —    | —    | —     | —     | —   | —     |
| 10      | —      | —    | —    | —    | —     | —     | —   | —     |
| 12      | 1/2"   | 23   | 30.2 | 6.73 | 82.5  | 50.5  | 9.5 | 25.5  |
| 16      | 3/4"   | 24.8 | 38.1 | 6.73 | 94.5  | 58.5  | 12  | 31.8  |
| 19      | 3/4"   | 28   | 38.1 | 6.73 | 106   | 65    | 15  | 31.8  |
| 25      | 1"     | 29.4 | 44.4 | 8    | 123   | 75    | 20  | 39.75 |
| 31      | 1.1/4" | 33.8 | 50.8 | 8    | 143.3 | 86.5  | 26  | 44.5  |
| 38      | 1.1/2" | 40.4 | 60.3 | 8    | 171.9 | 101.9 | 32  | 54    |
| 51      | 2"     | 46.3 | 71.4 | 9.53 | 191.5 | 119   | 43  | 63.3  |

PART NO.453F

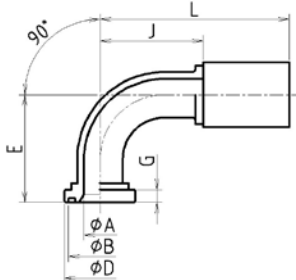


## DHD SERIES

### DHD Series-4SP/4SH Fittings

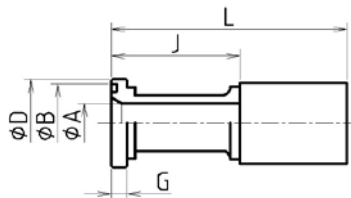
| HOSE ID | SIZE   | E    | D    | G    | L     | J    | A   | B     |
|---------|--------|------|------|------|-------|------|-----|-------|
| 6       | —      | —    | —    | —    | —     | —    | —   | —     |
| 8       | —      | —    | —    | —    | —     | —    | —   | —     |
| 10      | —      | —    | —    | —    | —     | —    | —   | —     |
| 12      | 1/2"   | 47   | 30.2 | 6.73 | 71    | 39   | 9.5 | 25.5  |
| 16      | 3/4"   | 53   | 38.1 | 6.73 | 85    | 49   | 12  | 31.8  |
| 19      | 3/4"   | 59   | 38.1 | 6.73 | 99    | 58   | 15  | 31.8  |
| 25      | 1"     | 66   | 44.4 | 8    | 115   | 67   | 20  | 39.75 |
| 31      | 1.1/4" | 78.5 | 50.8 | 8    | 140.3 | 83.5 | 26  | 44.5  |
| 38      | 1.1/2" | 94   | 60.3 | 8    | 171   | 101  | 32  | 54    |
| 51      | 2"     | 115  | 71.4 | 9.53 | 202.5 | 130  | 43  | 63.3  |

PART NO.903F



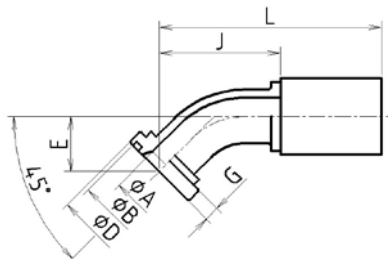
| HOSE ID | SIZE   | D    | G     | L     | J  | A   | B     |
|---------|--------|------|-------|-------|----|-----|-------|
| 6       | —      | —    | —     | —     | —  | —   | —     |
| 8       | —      | —    | —     | —     | —  | —   | —     |
| 10      | —      | —    | —     | —     | —  | —   | —     |
| 12      | 1/2"   | 31.7 | 7.75  | 74    | 42 | 9.5 | 25.5  |
| 16      | 3/4"   | 41.3 | 8.76  | 81    | 45 | 12  | 31.8  |
| 19      | 3/4"   | 41.3 | 8.76  | 86    | 45 | 15  | 31.8  |
| 25      | 1"     | 47.6 | 9.53  | 98    | 50 | 20  | 39.75 |
| 31      | 1.1/4" | 54   | 10.29 | 114.8 | 58 | 26  | 44.51 |
| 38      | 1.1/2" | 63.5 | 12.57 | 137   | 67 | 32  | 53.84 |
| 51      | 2"     | 79.4 | 12.57 | 149.5 | 77 | 43  | 63.37 |

PART NO.6F



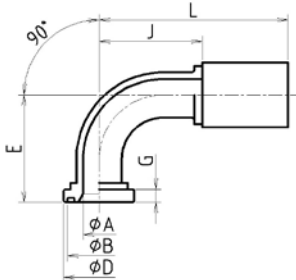
| HOSE ID | SIZE   | E    | D    | G     | L     | J    | A   | B     |
|---------|--------|------|------|-------|-------|------|-----|-------|
| 6       | —      | —    | —    | —     | —     | —    | —   | —     |
| 8       | —      | —    | —    | —     | —     | —    | —   | —     |
| 10      | —      | —    | —    | —     | —     | —    | —   | —     |
| 12      | 1/2"   | 25.1 | 31.7 | 7.75  | 85    | 53   | 9.5 | 25.5  |
| 16      | 3/4"   | 27.8 | 41.3 | 8.76  | 97    | 61   | 12  | 31.8  |
| 19      | 3/4"   | 30.9 | 41.3 | 8.76  | 108.5 | 67.5 | 15  | 31.8  |
| 25      | 1"     | 34.4 | 47.6 | 9.53  | 128   | 80   | 20  | 39.75 |
| 31      | 1.1/4" | 41.5 | 54   | 10.29 | 151.8 | 95   | 26  | 44.51 |
| 38      | 1.1/2" | 50.3 | 63.5 | 12.57 | 182   | 112  | 32  | 53.84 |
| 51      | 2"     | 62   | 79.4 | 12.57 | 207.5 | 135  | 43  | 63.37 |

PART NO.456F



| HOSE ID | SIZE   | E    | D    | G     | L     | J    | A   | B     |
|---------|--------|------|------|-------|-------|------|-----|-------|
| 6       | —      | —    | —    | —     | —     | —    | —   | —     |
| 8       | —      | —    | —    | —     | —     | —    | —   | —     |
| 10      | —      | —    | —    | —     | —     | —    | —   | —     |
| 12      | 1/2"   | 48.5 | 31.7 | 7.75  | 71    | 39   | 9.5 | 25.5  |
| 16      | 3/4"   | 55   | 41.3 | 8.76  | 85    | 49   | 12  | 31.8  |
| 19      | 3/4"   | 63   | 41.3 | 8.76  | 98    | 57   | 15  | 31.8  |
| 25      | 1"     | 73   | 47.6 | 9.53  | 115   | 67   | 20  | 39.75 |
| 31      | 1.1/4" | 89.5 | 54   | 10.29 | 140.3 | 83.5 | 26  | 44.51 |
| 38      | 1.1/2" | 104  | 63.5 | 12.57 | 171   | 101  | 32  | 53.84 |
| 51      | 2"     | 137  | 79.4 | 12.57 | 202.5 | 130  | 43  | 63.37 |

PART NO.906F



## R15 Series

### Hose Layline Color : Purple

#### Hose Structure

INNER COVER :  
OIL RESISTANT SYNTHETIC RUBBER

REINFORCEMENT : STEEL WIRE

OUTER COVER :  
Oil and Weather Resistant Synthetic Rubber

#### Recommended Fluids

General Hydraulic Oil,  
Mineral Hydraulic Oil

#### Hose Structure

-40℃~+120℃ (-40F~+212F)

#### Hose Structure & Reinforcement

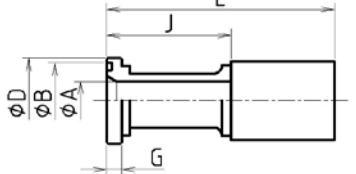
6W/S



| DHD-R15 |      |      |      |      |          |      |
|---------|------|------|------|------|----------|------|
|         | I.D. |      | O.D. |      | Max.W.P. |      |
|         | inch | mm   | inch | mm   | Psi      | MPa  |
| -31     | 1.25 | 31.8 | 1.96 | 49.7 | 6,100    | 42.0 |
| -38     | 1.50 | 38.1 | 2.28 | 57.8 | 6,100    | 42.0 |
| -51     | 2.00 | 50.8 | 2.88 | 73.1 | 6,100    | 42.0 |

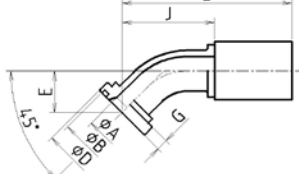
| HOSE ID | SIZE     | E | D    | G    | L   | J   | A    | B     |
|---------|----------|---|------|------|-----|-----|------|-------|
| 16      | —        | — | —    | —    | —   | —   | —    | —     |
| 19      | —        | — | —    | —    | —   | —   | —    | —     |
| 25      | —        | — | —    | —    | —   | —   | —    | —     |
| 31      | 1 · 1/4" | — | 54   | 10.3 | 149 | 71  | 26   | 44.51 |
| 38      | 1 · 1/2" | — | 63.5 | 12.6 | 163 | 73  | 31.8 | 53.84 |
| 51      | 2"       | — | 79.4 | 12.6 | 235 | 110 | 42   | 63.37 |

PART NO.6F



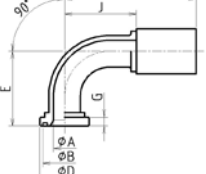
| HOSE ID | SIZE     | E  | D    | G    | L   | J   | A    | B     |
|---------|----------|----|------|------|-----|-----|------|-------|
| 16      | —        | —  | —    | —    | —   | —   | —    | —     |
| 19      | —        | —  | —    | —    | —   | —   | —    | —     |
| 25      | —        | —  | —    | —    | —   | —   | —    | —     |
| 31      | 1 · 1/4" | 47 | 54   | 10.3 | 183 | 105 | 27.1 | 44.51 |
| 38      | 1 · 1/2" | 63 | 63.5 | 12.6 | 235 | 145 | 32.4 | 53.84 |
| 51      | 2"       | 76 | 79.4 | 12.6 | 311 | 186 | 42   | 63.37 |

PART NO.456F



| HOSE ID | SIZE     | E   | D    | G    | L   | J   | A    | B     |
|---------|----------|-----|------|------|-----|-----|------|-------|
| 16      | —        | —   | —    | —    | —   | —   | —    | —     |
| 19      | —        | —   | —    | —    | —   | —   | —    | —     |
| 25      | —        | —   | —    | —    | —   | —   | —    | —     |
| 31      | 1 · 1/4" | 100 | 54   | 10.3 | 174 | 96  | 27.1 | 44.51 |
| 38      | 1 · 1/2" | 115 | 63.5 | 12.6 | 205 | 115 | 32.4 | 53.84 |
| 51      | 2"       | 155 | 79.4 | 12.6 | 291 | 166 | 42   | 63.37 |

PART NO.906F



Manual crimping machine

We have been providing not only Hose, Fittings and Hose Assemblies but also we provide manual crimping lease service.  
To market's satisfaction, we provide corresponding crimping parameters, integrative implementation and technical services.

Crimping machine specification

|                            | AD20        | AD32        |
|----------------------------|-------------|-------------|
| Crimping range (mm)        | 10~61       | 10~87       |
| Crimping force (kn)        | 1370        | 2000        |
| Number of crimpings / hour | 850         | 850         |
| Hose size ID (Inch)        | 1½          | 2           |
| Die type                   | 20          | 32          |
| Max opening (mm)           | +25         | +33         |
| motor (kw)                 | 3           | 4           |
| Width*length*height (mm)   | 800*630*626 | 800*630*637 |
| Weight without oil (kg)    | 157         | 205         |



Type: AD20



Type: AD32

ADVANSTAR Crimping range



| Crimping Machine | ADVANSTAR Crimping range |     |     |         |
|------------------|--------------------------|-----|-----|---------|
| AD20             |                          | 1SN | 2SN | 4SP 4SH |
|                  | -6                       | ●   | ●   |         |
|                  | -8                       | ●   | ●   |         |
|                  | -10                      | ●   | ●   | ●       |
|                  | -12                      | ●   | ●   | ●       |
|                  | -16                      | ●   | ●   | ●       |
|                  | -19                      | ●   | ●   | ● ●     |
|                  | -25                      | ●   | ●   | ● ●     |
|                  | -31                      |     |     |         |
|                  | -38                      |     |     |         |
|                  | -51                      |     |     |         |
| AD32             |                          | 1SN | 2SN | 4SP 4SH |
|                  | -6                       | ●   | ●   |         |
|                  | -8                       | ●   | ●   |         |
|                  | -10                      | ●   | ●   | ●       |
|                  | -12                      | ●   | ●   | ●       |
|                  | -16                      | ●   | ●   | ●       |
|                  | -19                      | ●   | ●   | ● ●     |
|                  | -25                      | ●   | ●   | ● ●     |
|                  | -31                      | ●   | ●   | ● ●     |
|                  | -38                      | ●   | ●   | ● ●     |
|                  | -51                      | ●   | ●   | ● ●     |