

## Magnetically Compensated Choke, compact



Magnetically compensated choke  
from front side  
Solder THT terminal



Magnetically compensated choke  
from front side  
Solder THT terminal

See below:

### Approvals and Compliances

#### Description

- Current compensated choke
- THT-terminals
- Multiple PCB-mounting options
- High inductance and compact dimensions
- Multiple pin configurations

#### Applications

- Attenuation of common mode interferences
- Designed for 230/400 VAC applications
- Chopper amplifiers
- DC drives and stepper motor controls
- Switching power supplies

#### Weblinks

[pdf data sheet](#), [html datasheet](#), [General Product Information](#), [Approvals](#), [Distributor-Stock-Check](#), [Detailed request for product](#), [SPICE Library](#)

#### Technical Data

|                           |                              |
|---------------------------|------------------------------|
| Rated voltage             | up to 250 VAC<br>UL 250 VAC  |
| Rated Current             | 0.3 - 10 A @ Ta 40 °C        |
| Rated inductance          | 0.5 - 100 mH, Tol. -30% +50% |
| Power Operating Frequency | 50 / 60 Hz                   |
| Terminal Type             | THT                          |
| Weight                    | 1 - 55 g                     |
| Material                  | UL 94V-0                     |
| Sealing Compound          | UL 94V-0                     |

|                           |                                          |
|---------------------------|------------------------------------------|
| Test Voltage              | 1.5 kV, 50 Hz, 1 min, winding to winding |
| Isolation Voltage         | 4 kV eff., winding to ambient            |
| Climatic Category         | 40/125/56 acc. to IEC 60068-1            |
| Allowable Operation Temp. | -40 °C to 125 °C UL -25 °C               |

### Approvals and Compliances

Detailed information on product approvals, code requirements, usage instructions and detailed test conditions can be looked up in [Details about Approvals](#)

SCHURTER products are designed for use in industrial environments. They have approvals from independent testing bodies according to national and international standards. Products with specific characteristics and requirements such as required in the automotive sector according to IATF 16949, medical technology according to ISO 13485 or in the aerospace industry can be offered exclusively with customer-specific, individual agreements by SCHURTER.

#### Approvals

The approval mark is used by the testing authorities to certify compliance with the safety requirements placed on electronic products.

Approval Reference Type: DKFP

| Approval Logo                                                                       | Certificates                 | Certification Body | Description            |
|-------------------------------------------------------------------------------------|------------------------------|--------------------|------------------------|
|  | <a href="#">UL Approvals</a> | UL                 | UR File Number: E72928 |

#### Application standards

Application standards where the product can be used

| Organization                                                                        | Design                         | Standard       | Description                                                                                   |
|-------------------------------------------------------------------------------------|--------------------------------|----------------|-----------------------------------------------------------------------------------------------|
|  | Suitable for applications acc. | IEC/UL 62368-1 | Audio/video, information and communication technology equipment - Part 1: Safety requirements |

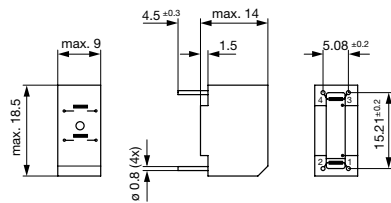
## Compliances

The product complies with following Guide Lines

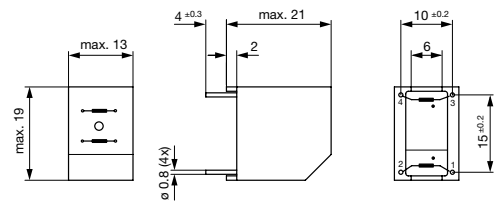
| Identification                                                                   | Details                                        | Initiator   | Description                                                                                                                                                                                           |
|----------------------------------------------------------------------------------|------------------------------------------------|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <a href="#">CE declaration of conformity</a>   | SCHURTER AG | The CE marking declares that the product complies with the applicable requirements laid down in the harmonisation of Community legislation on its affixing in accordance with EU Regulation 765/2008. |
|  | <a href="#">UKCA declaration of conformity</a> | SCHURTER AG | The UKCA marking declares that the product complies with the applicable requirements laid down in the British Amendment of Regulation (EC) 765/2008.                                                  |
|  | <a href="#">RoHS</a>                           | SCHURTER AG | Directive RoHS 2011/65/EU, Amendment (EU) 2015/863                                                                                                                                                    |
|  | <a href="#">China RoHS</a>                     | SCHURTER AG | The law SJ / T 11363-2006 (China RoHS) has been in force since 1 March 2007. It is similar to the EU directive RoHS.                                                                                  |
|  | <a href="#">REACH</a>                          | SCHURTER AG | On 1 June 2007, Regulation (EC) No 1907/2006 on the Registration, Evaluation, Authorization and Restriction of Chemicals 1 (abbreviated as "REACH") entered into force.                               |

## Dimensions [mm]

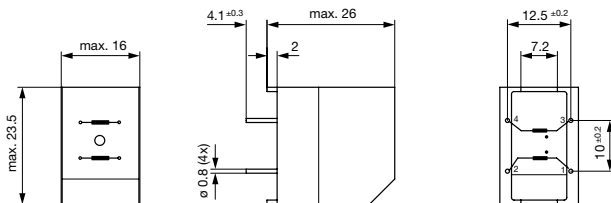
Case 1A



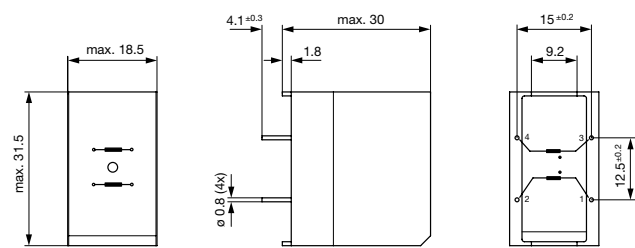
Case 1B



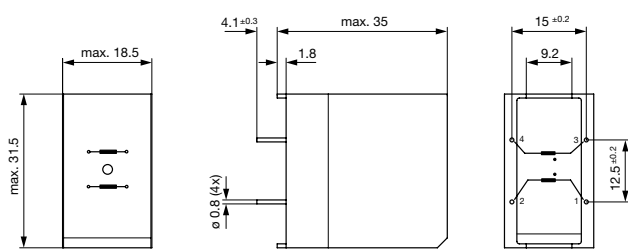
Case 1C



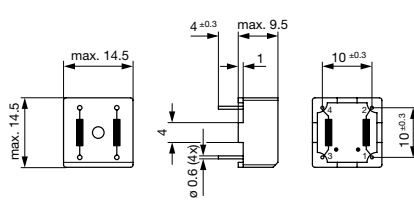
Case 1D



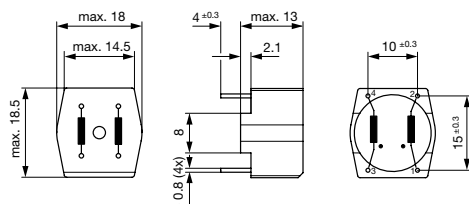
Case 1E



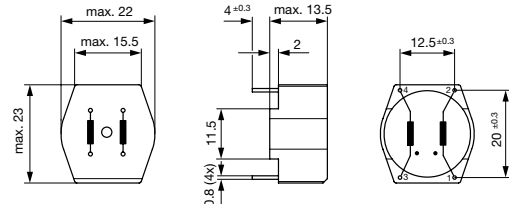
Case 2A



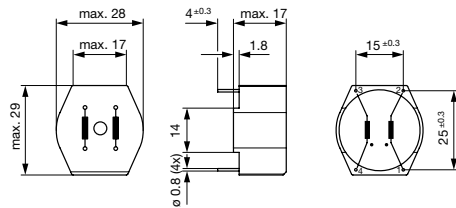
Case 2B



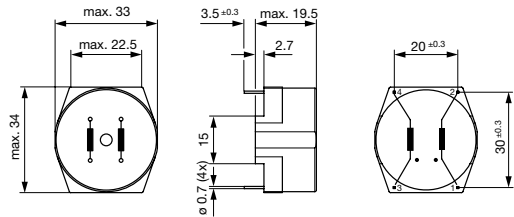
Case 2C



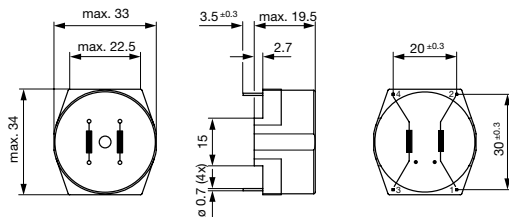
Case 2D



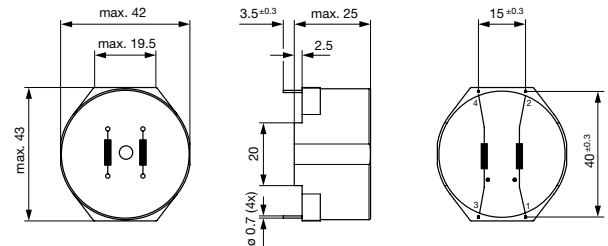
Case 2E



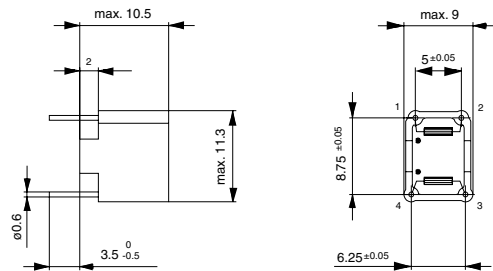
Case 2G



Case 2H

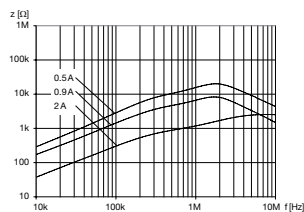


Case 48-2

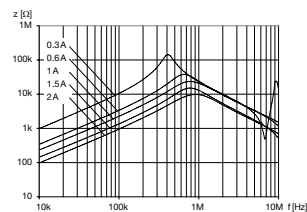


## Impedance curves

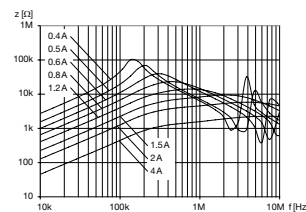
DKFP\_6248\_xxxx



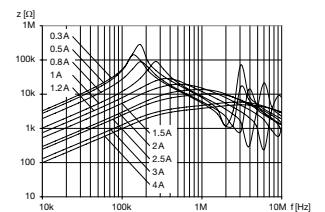
DKFP\_A2xA\_xxxx



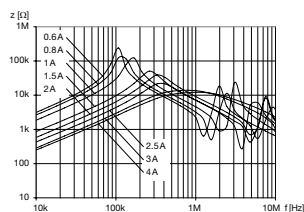
DKFP\_B2xB\_xxxx



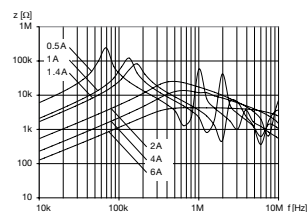
DKFP\_C2xC\_xxxx



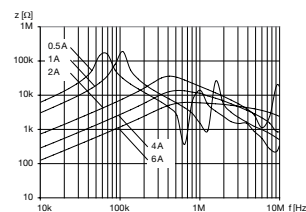
DKFP\_D2xD\_xxxx



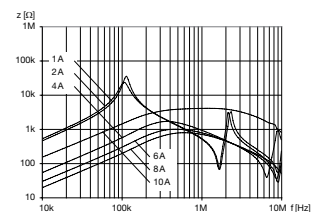
DKFP\_E2xE\_xxxx



DKFP\_G22G\_xxxx



DKFP\_H22H\_xxxx



## Variants

| I <sub>n</sub> [A] | L <sub>n</sub> [mH] | R <sub>cu</sub> [mΩ] | Power Dissipation [W] | f <sub>RES</sub> [MHz] | Weight [g] | Housing | Packing unit [pcs.] | Order Number   |
|--------------------|---------------------|----------------------|-----------------------|------------------------|------------|---------|---------------------|----------------|
| 0.3                | 12                  | 1280                 | 0.12                  | 0.55                   | 4 g        | 1A      | 90                  | DKFP-A21A-D312 |
| 0.3                | 12                  | 1280                 | 0.12                  | 0.55                   | 3 g        | 2A      | 72                  | DKFP-A22A-D312 |
| 0.3                | 47                  | 1850                 | 0.17                  | 0.15                   | 14 g       | 1C      | 35                  | DKFP-C21C-D347 |
| 0.3                | 47                  | 1850                 | 0.17                  | 0.15                   | 11 g       | 2C      | 32                  | DKFP-C22C-D347 |
| 0.4                | 39                  | 1286                 | 0.2                   | 0.15                   | 8 g        | 1B      | 120                 | DKFP-B21B-D439 |
| 0.4                | 39                  | 1286                 | 0.2                   | 0.15                   | 6 g        | 2B      | 45                  | DKFP-B22B-D439 |
| 0.5                | 100                 | 3100                 | 0.78                  | 0.07                   | 33 g       | 2G      | 28                  | DKFP-G22G-D5J0 |
| 0.5                | 27                  | 841                  | 0.2                   | 0.2                    | 8 g        | 1B      | 120                 | DKFP-B21B-D527 |
| 0.5                | 27                  | 841                  | 0.21                  | 0.2                    | 6 g        | 2B      | 45                  | DKFP-B22B-D527 |
| 0.5                | 39                  | 880                  | 0.22                  | 0.15                   | 14 g       | 1C      | 35                  | DKFP-C21C-D539 |
| 0.5                | 39                  | 880                  | 0.22                  | 0.15                   | 11 g       | 2C      | 32                  | DKFP-C22C-D539 |
| 0.5                | 4                   | 500                  | 0.25                  | 1.2                    | 1.07 g     | 48-2    | 176                 | DKFP-6248-D504 |
| 0.5                | 82                  | 2840                 | 0.71                  | 0.07                   | 34 g       | 1E      | 70                  | DKFP-E21E-D582 |
| 0.5                | 82                  | 2840                 | 0.71                  | 0.07                   | 32 g       | 2E      | 28                  | DKFP-E22E-D582 |
| 0.6                | 15                  | 453                  | 0.16                  | 0.35                   | 8 g        | 1B      | 120                 | DKFP-B21B-D615 |
| 0.6                | 15                  | 453                  | 0.16                  | 0.35                   | 6 g        | 2B      | 45                  | DKFP-B22B-D615 |
| 0.6                | 4.4                 | 380                  | 0.14                  | 1.1                    | 4 g        | 1A      | 90                  | DKFP-A21A-D64M |
| 0.6                | 4.4                 | 380                  | 0.14                  | 1.1                    | 3 g        | 2A      | 72                  | DKFP-A22A-D64M |
| 0.6                | 47                  | 1170                 | 0.42                  | 0.1                    | 25 g       | 1D      | 56                  | DKFP-D21D-D647 |
| 0.6                | 47                  | 1170                 | 0.42                  | 0.1                    | 20 g       | 2D      | 35                  | DKFP-D22D-D647 |
| 0.8                | 10                  | 336                  | 0.21                  | 0.45                   | 8 g        | 1B      | 120                 | DKFP-B21B-D810 |
| 0.8                | 10                  | 336                  | 0.22                  | 0.45                   | 6 g        | 2B      | 45                  | DKFP-B22B-D810 |
| 0.8                | 27                  | 520                  | 0.33                  | 0.18                   | 14 g       | 1C      | 35                  | DKFP-C21C-D827 |
| 0.8                | 27                  | 520                  | 0.33                  | 0.18                   | 11 g       | 2C      | 32                  | DKFP-C22C-D827 |
| 0.8                | 39                  | 955                  | 0.61                  | 0.15                   | 25 g       | 1D      | 56                  | DKFP-D21D-D839 |
| 0.8                | 39                  | 955                  | 0.61                  | 0.15                   | 20 g       | 2D      | 40                  | DKFP-D22D-D839 |
| 0.9                | 2                   | 240                  | 0.39                  | 1.6                    | 1.15 g     | 48-2    | 176                 | DKFP-6248-0102 |
| 1                  | 15                  | 350                  | 0.35                  | 0.25                   | 11 g       | 2C      | 32                  | DKFP-C22C-0115 |
| 1                  | 27                  | 554                  | 0.55                  | 0.16                   | 20 g       | 2D      | 35                  | DKFP-D22D-0127 |
| 1                  | 3                   | 200                  | 0.2                   | 1.7                    | 4 g        | 1A      | 90                  | DKFP-A21A-0103 |
| 1                  | 3                   | 200                  | 0.2                   | 1.7                    | 3 g        | 2A      | 72                  | DKFP-A22A-0103 |
| 1                  | 33                  | 805                  | 0.8                   | 0.13                   | 34 g       | 1E      | 70                  | DKFP-E21E-0133 |
| 1                  | 33                  | 805                  | 0.8                   | 0.13                   | 32 g       | 2E      | 28                  | DKFP-E22E-0133 |
| 1                  | 47                  | 950                  | 0.95                  | 0.1                    | 33 g       | 2G      | 28                  | DKFP-G22G-0147 |
| 1                  | 68                  | 1400                 | 1.4                   | 0.1                    | 55 g       | 2H      | 18                  | DKFP-H22H-0168 |
| 1.0                | 15                  | 350                  | 0.35                  | 0.25                   | 14 g       | 1C      | 35                  | DKFP-C21C-0115 |
| 1.0                | 27                  | 554                  | 0.55                  | 0.16                   | 25 g       | 1D      | 56                  | DKFP-D21D-0127 |
| 1.2                | 10                  | 200                  | 0.29                  | 0.35                   | 14 g       | 1C      | 35                  | DKFP-C21C-1K10 |
| 1.2                | 10                  | 200                  | 0.29                  | 0.35                   | 11 g       | 2C      | 32                  | DKFP-C22C-1K10 |
| 1.2                | 6.8                 | 219                  | 0.31                  | 0.6                    | 8 g        | 1B      | 120                 | DKFP-B21B-1K6Q |
| 1.2                | 6.8                 | 219                  | 0.32                  | 0.6                    | 6 g        | 2B      | 45                  | DKFP-B22B-1K6Q |
| 1.4                | 27                  | 520                  | 1                     | 0.16                   | 34 g       | 1E      | 70                  | DKFP-E21E-1M27 |
| 1.4                | 27                  | 520                  | 1                     | 0.16                   | 32 g       | 2E      | 28                  | DKFP-E22E-1M27 |
| 1.5                | 1.6                 | 94                   | 0.21                  | 3.1                    | 4 g        | 1A      | 90                  | DKFP-A21A-1N10 |
| 1.5                | 1.6                 | 94                   | 0.21                  | 3.1                    | 3 g        | 2A      | 72                  | DKFP-A22A-1N10 |
| 1.5                | 15                  | 232                  | 0.52                  | 0.26                   | 25 g       | 1D      | 56                  | DKFP-D21D-1N15 |
| 1.5                | 15                  | 232                  | 0.52                  | 0.26                   | 20 g       | 2D      | 35                  | DKFP-D22D-1N15 |
| 1.5                | 3.3                 | 122                  | 0.28                  | 1.8                    | 8 g        | 1B      | 120                 | DKFP-B21B-1N3L |
| 1.5                | 3.3                 | 122                  | 0.28                  | 1.8                    | 6 g        | 2B      | 45                  | DKFP-B22B-1N3L |
| 1.5                | 6.8                 | 150                  | 0.34                  | 0.5                    | 14 g       | 1C      | 35                  | DKFP-C21C-1N6Q |
| 1.5                | 6.8                 | 150                  | 0.34                  | 0.5                    | 11 g       | 2C      | 32                  | DKFP-C22C-1N6Q |
| 2                  | 0.5                 | 50                   | 0.4                   | 4.5                    | 1.07 g     | 48-2    | 176                 | DKFP-6248-02D5 |
| 2                  | 1.1                 | 61                   | 0.25                  | 3.5                    | 4 g        | 1A      | 90                  | DKFP-A21A-021J |
| 2                  | 1.1                 | 61                   | 0.25                  | 3.5                    | 3 g        | 2A      | 72                  | DKFP-A22A-021J |

| I <sub>n</sub> [A] | L <sub>n</sub> [mH] | R <sub>cu</sub> [mΩ] | Power Dissipation [W] | f <sub>RES</sub> [MHz] | Weight [g] | Housing | Packing unit [pcs.] | Order Number   |
|--------------------|---------------------|----------------------|-----------------------|------------------------|------------|---------|---------------------|----------------|
| 2                  | 1.8                 | 57                   | 0.23                  | 3                      | 8 g        | 1B      | 120                 | DKFP-B21B-021Q |
| 2                  | 1.8                 | 57                   | 0.23                  | 3                      | 6 g        | 2B      | 45                  | DKFP-B22B-021Q |
| 2                  | 10                  | 149                  | 0.6                   | 0.34                   | 25 g       | 1D      | 56                  | DKFP-D21D-0210 |
| 2                  | 10                  | 149                  | 0.6                   | 0.34                   | 20 g       | 2D      | 35                  | DKFP-D22D-0210 |
| 2                  | 10                  | 245                  | 1                     | 0.4                    | 33 g       | 2G      | 28                  | DKFP-G22G-0210 |
| 2                  | 18                  | 360                  | 1.4                   | 0.2                    | 55 g       | 2H      | 18                  | DKFP-H22H-0218 |
| 2                  | 4.2                 | 92                   | 0.37                  | 0.9                    | 14 g       | 1C      | 35                  | DKFP-C21C-024K |
| 2                  | 4.2                 | 92                   | 0.37                  | 0.9                    | 11 g       | 2C      | 32                  | DKFP-C22C-024K |
| 2                  | 6.8                 | 200                  | 0.8                   | 0.5                    | 34 g       | 1E      | 70                  | DKFP-E21E-026Q |
| 2                  | 6.8                 | 200                  | 0.8                   | 0.5                    | 32 g       | 2E      | 28                  | DKFP-E22E-026Q |
| 2.5                | 3.3                 | 93                   | 0.46                  | 1.2                    | 14 g       | 1C      | 35                  | DKFP-C21C-2N3L |
| 2.5                | 3.3                 | 73                   | 0.45                  | 1.2                    | 11 g       | 2C      | 60                  | DKFP-C22C-2N3L |
| 2.5                | 6.8                 | 101                  | 0.63                  | 0.36                   | 25 g       | 1D      | 56                  | DKFP-D21D-2N6Q |
| 2.5                | 6.8                 | 101                  | 0.63                  | 0.36                   | 20 g       | 2D      | 40                  | DKFP-D22D-2N6Q |
| 3                  | 2                   | 52                   | 0.47                  | 2.5                    | 14 g       | 1C      | 35                  | DKFP-C21C-0302 |
| 3                  | 2                   | 52                   | 0.47                  | 2.5                    | 11 g       | 2C      | 32                  | DKFP-C22C-0302 |
| 3                  | 4.2                 | 63                   | 0.57                  | 0.85                   | 25 g       | 1D      | 56                  | DKFP-D21D-034K |
| 3                  | 4.2                 | 63                   | 0.57                  | 0.85                   | 20 g       | 2D      | 35                  | DKFP-D22D-034K |
| 4                  | 0.7                 | 18                   | 0.29                  | 6.5                    | 8 g        | 1B      | 120                 | DKFP-B21B-04D7 |
| 4                  | 0.7                 | 18                   | 0.29                  | 6.5                    | 6 g        | 2B      | 45                  | DKFP-B22B-04D7 |
| 4                  | 1.5                 | 30                   | 0.48                  | 2.8                    | 14 g       | 1C      | 35                  | DKFP-C21C-041N |
| 4                  | 1.5                 | 30                   | 0.48                  | 2.8                    | 11 g       | 2C      | 60                  | DKFP-C22C-041N |
| 4                  | 3.3                 | 45                   | 0.72                  | 1                      | 25 g       | 1D      | 56                  | DKFP-D21D-043L |
| 4                  | 3.3                 | 62                   | 1                     | 0.6                    | 34 g       | 1E      | 70                  | DKFP-E21E-043L |
| 4                  | 3.3                 | 45                   | 0.72                  | 1                      | 20 g       | 2D      | 35                  | DKFP-D22D-043L |
| 4                  | 3.3                 | 62                   | 1                     | 0.6                    | 32 g       | 2E      | 28                  | DKFP-E22E-043L |
| 4                  | 3.9                 | 70                   | 1.1                   | 0.5                    | 33 g       | 2G      | 28                  | DKFP-G22G-043R |
| 4                  | 6.8                 | 100                  | 1.6                   | 0.6                    | 55 g       | 2H      | 18                  | DKFP-H22H-046Q |
| 6                  | 1.8                 | 23                   | 0.83                  | 0.7                    | 34 g       | 1E      | 70                  | DKFP-E21E-061Q |
| 6                  | 1.8                 | 23                   | 0.83                  | 0.7                    | 32 g       | 2E      | 28                  | DKFP-E22E-061Q |
| 6                  | 1.8                 | 23                   | 0.83                  | 0.7                    | 33 g       | 2G      | 28                  | DKFP-G22G-061Q |
| 6                  | 3.9                 | 46                   | 1.6                   | 0.7                    | 55 g       | 2H      | 18                  | DKFP-H22H-063R |
| 8                  | 2.7                 | 22                   | 1.4                   | 1                      | 55 g       | 2H      | 18                  | DKFP-H22H-082P |
| 10                 | 1.8                 | 13                   | 1.3                   | 1.1                    | 55 g       | 2H      | 18                  | DKFP-H22H-101Q |

Availability for all products can be searched real-time: <https://www.schurter.com/en/info-center/support-tools/stock-check-distributors>