



## VIBRATORY SIEVE SHAKER AS 300 CONTROL

**The AS 300 model has all the benefits of the AS 200 control but is designed for test sieves with a diameter up to 315 mm, providing a sieve surface which is approximately 2.5 times larger. Therefore, the AS 300 is able to separate up to 6 kg of material in one working run. Repetitive operations are greatly simplified with the possibility to store up to 99 standard operating procedures (SOP). For perfectly reproducible sieving results, the AS 300 control can be programmed with sieve acceleration independent of the power frequency instead of vibration height.**

The microprocessor-controlled measuring device monitors and automatically readjusts the vibration height. All sieving parameters are set, displayed and monitored digitally. The AS 300 control can be calibrated, and is thus suitable for test materials monitoring. Like all instruments of the "control" series, the AS 300 has an integrated interface for using the evaluation software EasySieve® to control, set and visualize all parameters, including complete documentation of the sieving process



## ACCURACY & EFFICIENCY

- | Sieving with 3-D effect
- | For sieves up to (Ø) 315 mm
- | Suitable for dry and wet sieving
- | Measuring range 20 µm to 40 mm
- | Memory for 99 Standard Operating Procedures (SOPs)
- | Digital setting and control of sieving parameters
- | Sieve acceleration independent of power frequency
- | Reproducible and globally comparable sieving results
- | Short sieving times due to large sieve surface and effective movement
- | Test materials monitoring according to DIN EN ISO 9001

## VIBRATORY SIEVE SHAKER AS 300 CONTROL

# WET SIEVING WITH VIBRATORY SIEVE SHAKERS

There are many applications for which wet sieving is the best solution, e.g. when the material to be tested is a suspension or when a very fine sample ( $< 45 \mu\text{m}$ ) that tends to agglomerate needs to be sieved. All vibratory sieve shakers from RETSCH can be used for wet sieving. There are special accessories like clamping lids with spray nozzle and collecting pans with outlet available. By placing RETSCH's venting rings between the sieves, air cushions can expand without letting liquid or sample material escape.



## VIBRATORY SIEVE SHAKER AS 300 CONTROL

### ACCESSORIES & OPTIONS

The sieve shakers of the control series can be equipped with a variety of accessories to provide for a wealth of application requirements.



#### | Clamping units

With the RETSCH clamping devices the sieves are clamped safely, quickly and conveniently on the sieve shaker. The clamping devices "comfort" are particularly user-friendly and timesaving.



#### | Accessories for test sieves

Collecting pans, intermediate pans, intermediate rings and sieve lids.

#### | Accessories for wet sieving

Clamping lid with nozzle, collecting pans with outlet, venting rings.

#### | Sieving Aids

Chain rings, brushes, cubes, balls (e.g. for reducing agglomerations when sieving particles < 100 µm and keeping the mesh free).



#### | IQ/OQ Documents

We provide IQ/OQ documentation for the „control“ sieve shakers to support IQ/OQ certification by our customers.



#### | Sample Dividers

Meaningful results can only be obtained if the sample represents the original material. Sample dividers produce representative part samples, thus ensuring reproducibility of the analysis.

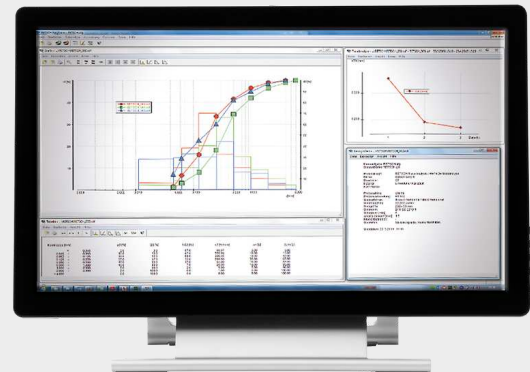
#### | Ultrasonic baths and dryers

Suitable for thorough cleaning of test sieves and for quick, gentle drying of samples and sieves.

**RETSCH TEST SIEVES AND ACCESSORIES - ENGINEERED FOR SUPERIOR PERFORMANCE**

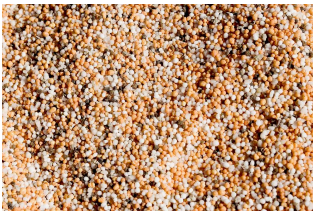
## EASYSIEVE / EASYSIEVE CFR EVALUATION SOFTWARE

EasySieve, the software for particle size analyses, exceeds manual evaluation in many aspects. The software is able to automatically control the necessary measurement and weighing procedures – from the registration of the weight of the sieve up to the evaluation of the data. It is simple and convenient to use and is also available in an FDA 21 CFR Part 11-conform version.

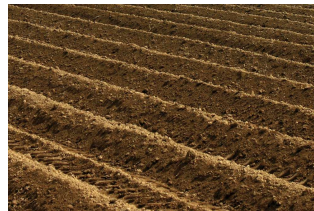


### VIBRATORY SIEVE SHAKER AS 300 CONTROL **TYPICAL SAMPLE MATERIALS**

RETSCH's vibratory sieve shakers are ideally suited for separation, fractioning and particle size determination of cement clinker, chemicals, coffee, construction materials, fertilizers, fillers, flours, grains, metals powders, minerals, nuts, plastics, sand, seeds, soils and washing powder.



*fertilizers*



*soil*



*cereals*



*construction materials*

To find the best solution for your sample preparation task, visit our application database.

## FUNCTIONAL PRINCIPLE

The AS 300 works with an electromagnetic drive that is patented by RETSCH (EP 0642844). This drive produces a 3D throwing motion that moves the product to be sieved equally over the whole sieving surface. The advantage: high stress capacity, extremely smooth operation and short sieving times with high separation efficiency.



[Click to view video](#)

## VIBRATORY SIEVE SHAKER AS 300 CONTROL

### TECHNICAL DATA

|                                                       |                                                                                                                                                                                                  |
|-------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Applications</b>                                   | separation, fractioning, particle size determination                                                                                                                                             |
| <b>Field of application</b>                           | agriculture, biology, chemistry / plastics, construction materials, engineering / electronics, environment / recycling, food, geology / metallurgy, glass / ceramics, medicine / pharmaceuticals |
| <b>Feed material</b>                                  | powders, bulk materials, suspensions                                                                                                                                                             |
| <b>Measuring range*</b>                               | 20 µm - 40 mm                                                                                                                                                                                    |
| <b>Sieving motion</b>                                 | throwing motion with angular momentum                                                                                                                                                            |
| <b>Max. batch / feed capacity</b>                     | 6 kg                                                                                                                                                                                             |
| <b>Max. number of fractions</b>                       | 11 / 17                                                                                                                                                                                          |
| <b>Max. mass of sieve stack</b>                       | 10 kg                                                                                                                                                                                            |
| <b>Amplitude</b>                                      | digital, 0.20 - > 2.20 mm                                                                                                                                                                        |
| <b>Controlled amplitude</b>                           | yes                                                                                                                                                                                              |
| <b>Sieve acceleration</b>                             | 1.0 - > 10.0 g                                                                                                                                                                                   |
| <b>Time display</b>                                   | digital, 1 - 99 min                                                                                                                                                                              |
| <b>Interval operation</b>                             | 1 - 99 s                                                                                                                                                                                         |
| <b>Storable SOPs</b>                                  | 99                                                                                                                                                                                               |
| <b>Suitable for dry sieving</b>                       | yes                                                                                                                                                                                              |
| <b>Suitable for wet sieving</b>                       | yes                                                                                                                                                                                              |
| <b>Serial interface</b>                               | yes                                                                                                                                                                                              |
| <b>Including test certificate / can be calibrated</b> | yes                                                                                                                                                                                              |
| <b>Suitable sieve diameters</b>                       | 100 mm / 200 mm / 203 mm (8") / 305 mm / 315 mm                                                                                                                                                  |
| <b>Max. height of sieve stack</b>                     | 510 mm                                                                                                                                                                                           |
| <b>Clamping devices</b>                               | standard, "comfort", each for wet and dry sieving                                                                                                                                                |
| <b>Protection code</b>                                | IP 21                                                                                                                                                                                            |
| <b>Electrical supply data</b>                         | 100-240 V, 50/60 Hz                                                                                                                                                                              |
| <b>Power connection</b>                               | 1-phase                                                                                                                                                                                          |
| <b>W x H x D</b>                                      | 417 x 220 x 384 mm                                                                                                                                                                               |
| <b>Net weight</b>                                     | ~ 42 kg                                                                                                                                                                                          |
| <b>Standards</b>                                      | CE                                                                                                                                                                                               |

\*depending on feed material and instrument configuration/settings

[www.retsch.com/as300control](http://www.retsch.com/as300control)

## ORDER DATA

### VIBRATORY SIEVE SHAKER AS 300 CONTROL

**Vibratory Sieve Shaker AS 300 control for test sieves up to 305 mm / 12" Ø**  
(please order clamping device, test sieves and collecting pan separately)

|             |                                                                                   |                |                     |                                        |
|-------------|-----------------------------------------------------------------------------------|----------------|---------------------|----------------------------------------|
| 30.033.0001 |  | AS 300 control | 100–240 V, 50/60 Hz | incl. test report acc. to EN 10204 2.2 |
|-------------|-----------------------------------------------------------------------------------|----------------|---------------------|----------------------------------------|

### CLAMPING DEVICES AS 300

**max. number of fractions, for test sieves Ø**

|             |                                                                                     |                                                      |
|-------------|-------------------------------------------------------------------------------------|------------------------------------------------------|
| 32.662.0008 |    | Clamping device "standard", 11, 305 mm Ø             |
| 32.662.0009 |   | Clamping device "comfort", 11, 305 mm Ø              |
| 32.662.0012 |  | Wet sieving clamping device "standard", 11, 305 mm Ø |
| 32.662.0014 |  | Wet sieving clamping device "comfort", 11, 305 mm Ø  |

### SIEVE STACKS AND ACCESSORIES AS 300

|               |                                                                                     |                                                                                                                                                            |
|---------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 60.158.000999 |  | Sieve stack consisting of 7 test sieves (ISO 3310-1), 305 mm Ø, 40 mm height (630 µm, 1.25 mm, 2.50 mm, 5 mm, 10 mm, 20 mm, 31.5 mm) and collecting pan    |
| 60.159.000999 |                                                                                     | Sieve stack consisting of 7 test sieves (ASTM E11), 305 mm (12") Ø, 40 mm height (30 mesh, 16 mesh, 8 mesh, 4 mesh, 3/8", 3/4", 1 1/4") and collecting pan |
| 22.243.0002   |                                                                                     | Rubber disc for sieve plate                                                                                                                                |
| 99.200.0028   |                                                                                     | IQ/OQ Documentation for AS 300 control                                                                                                                     |

### ACCESSORIES FOR CLAMPING DEVICES AS 200, AS 300, AS 400

#### CLAMPING LIDS

|             |                                                                                     |                                                                        |
|-------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------|
| 32.481.0022 |  | Clamping lid with large window of Perspex for test sieves 200/203 mm Ø |
|-------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------|

|             |                                                                                   |                                                                                  |
|-------------|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------|
| 32.481.0014 |  | Universal clamping lid with small window for test sieves 100/150/200/203 mm Ø    |
| 32.481.0015 |  | Universal wet sieving lid with small window for test sieves 100/150/200/203 mm Ø |
| 02.660.0011 |  | Clamping lid with large window of Perspex for test sieves 305 mm Ø               |
| 02.660.0017 |  | Wet sieving lid for test sieves 305 mm Ø                                         |

#### CLAMPING ELEMENTS

|             |                                                                                   |                                                                                  |
|-------------|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------|
| 32.142.0001 |  | Clamping nuts, (2 pieces) for clamping device "standard"                         |
| 32.737.0001 |  | Quick-clamping elements, (2 pieces) for clamping device "comfort" AS 200/300/400 |
| 05.114.0080 |                                                                                   | O-ring for quick-clamping element for AS 300 and AS 400, 1 piece                 |

#### CLAMPING RODS

|             |                                                                                     |                                                                                                    |
|-------------|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| 32.248.0002 |  | Threaded rods, (2 pieces) for clamping device "standard"                                           |
| 32.248.0001 |  | Threaded rods, short, (2 pieces) for clamping of max. 5 test sieves for clamping device "standard" |
| 32.742.0010 |  | Rods, smooth, (2 pieces) for clamping device "comfort" AS 300/400                                  |

### SIEVING AIDS

|             |                                                                                     |                                                                              |
|-------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------|
| 32.365.0001 |  | Chain ring for test sieves 200 mm and 203 mm Ø to support horizontal sieving |
| 32.050.0001 |  | Brushes, 3 pieces                                                            |
| 32.902.0001 |  | Cubes of polyurethane, 12 x 12 x 12 mm, 10 pieces                            |
| 32.902.0002 |  | Cubes of polyurethane, 20 x 20 x 20 mm, 10 pieces                            |

32.354.0001  Balls of rubber, 20 mm Ø, 5 pieces

32.354.0002  Balls of agate, 10 mm Ø, 10 pieces

32.354.0004 Balls of steatite, 6 mm Ø, 150 g

#### TEST SIEVE RACK

32.012.0001  Test Sieve Rack for 10 Test Sieves Ø 200 mm/8", height 50 mm/25 mm

## ACCESSORIES FOR TEST SIEVES (PANS, RINGS, LIDS)

#### FOR TEST SIEVES 200 MM Ø, HEIGHT 50 MM

69.720.0050  Collecting pan stainless steel 200 mm Ø height 50 mm

69.220.0050  Intermediate pan stainless steel 200 mm Ø height 50 mm

69.121.0050  Intermediate ring stainless steel 200 mm Ø height 50 mm

69.520.0051  Sieve lid stainless steel 200 mm Ø

69.420.0050  Collecting pan with outlet stainless steel 200 mm Ø height 50 mm

69.221.0025  Venting ring for wet sieving stainless steel 200 mm Ø height 25 mm

05.114.0174 O-ring for test sieves 200 mm Ø

#### FOR TEST SIEVES 200 MM Ø, HEIGHT 25 MM

69.720.0025  Collecting pan, stainless steel, 200 mm Ø, height 25 mm

69.220.0025  Intermediate pan, stainless steel, 200 mm Ø, height 25 mm

69.121.0025  Intermediate ring, stainless steel, 200 mm Ø, height 25 mm

|             |                                                                                   |                                                                       |
|-------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------|
| 69.520.0051 |  | Sieve lid, stainless steel, 200 mm Ø,                                 |
| 69.420.0050 |  | Collecting pan with outlet, stainless steel, 200 mm Ø, height 50 mm   |
| 69.221.0025 |  | Venting ring for wet sieving, stainless steel, 200 mm Ø, height 25 mm |
| 05.114.0174 |                                                                                   | O-ring for test sieves, , 200 mm Ø,                                   |

#### FOR TEST SIEVES 203 MM Ø / 8" Ø, HEIGHT 2"

|             |                                                                                     |                                                                |
|-------------|-------------------------------------------------------------------------------------|----------------------------------------------------------------|
| 69.720.3050 |    | Collecting pan, stainless steel, 8" Ø, height 2"               |
| 69.220.3050 |    | Intermediate pan, stainless steel, 8" Ø, height 2"             |
| 69.121.3050 |   | Intermediate ring, stainless steel, 8" Ø, height 2"            |
| 69.520.3051 |  | Sieve lid, stainless steel, 8" Ø,                              |
| 69.420.3050 |  | Collecting pan with outlet, stainless steel, 8" Ø, height 2"   |
| 69.221.3025 |  | Venting ring for wet sieving, stainless steel, 8" Ø, height 1" |
| 05.114.0174 |                                                                                     | O-ring for test sieves, , 8" Ø,                                |

#### FOR TEST SIEVES 203 MM Ø / 8" Ø, HEIGHT 1"

|             |                                                                                     |                                                     |
|-------------|-------------------------------------------------------------------------------------|-----------------------------------------------------|
| 69.720.3025 |  | Collecting pan, stainless steel, 8" Ø, height 1"    |
| 69.220.3025 |  | Intermediate pan, stainless steel, 8" Ø, height 1"  |
| 69.121.3025 |  | Intermediate ring, stainless steel, 8" Ø, height 1" |
| 69.520.3051 |  | Sieve lid, stainless steel, 8" Ø,                   |

69.420.3050  Collecting pan with outlet, stainless steel, 8" Ø, height 2"

69.221.3025  Venting ring for wet sieving, stainless steel, 8" Ø, height 1"

05.114.0174 O-ring for test sieves, , 8" Ø,

#### FOR TEST SIEVES 100 MM Ø

60.010.000100  Collecting pan, stainless steel, 100 mm Ø, height 40 mm

60.220.000100 Intermediate pan, stainless steel, 100 mm Ø, height 40 mm

60.935.000100  Intermediate ring, stainless steel, 100 mm Ø, height 40 mm

60.107.000100  Sieve lid, stainless steel, 100 mm Ø,

60.010.100100  Collecting pan with outlet, stainless steel, 100 mm Ø, height 40 mm

05.114.0045  O-ring for test sieves, , 100 mm Ø,

#### FOR TEST SIEVES 305 MM Ø

60.010.000305  Collecting pan, stainless steel, 305 mm Ø, height 40 mm

69.230.0050  Intermediate pan, stainless steel, 305 mm Ø, height 40 mm

60.935.000305  Intermediate ring, stainless steel, 305 mm Ø, height 40 mm

60.107.000305 Sieve lid, stainless steel, 305 mm Ø,

69.430.0050  Collecting pan with outlet, stainless steel, 305 mm Ø, height 56 mm

69.321.0050  Venting ring for wet sieving, stainless steel, 305 mm Ø, height 40 mm

05.114.0047  O-ring for test sieves, , 305 mm Ø,

## TEST SIEVES Ø 305 MM - 40 MM HEIGHT - ISO 3310/1 - STAINLESS STEEL / WIRE GAUZE

|               | # mm   | # mesh no. | Ø      | height | standard   |
|---------------|--------|------------|--------|--------|------------|
| 60.158.000025 | 25 µm  | -          | 305 mm | 40 mm  | ISO 3310/1 |
| 60.158.000032 | 32 µm  | -          | 305 mm | 40 mm  | ISO 3310/1 |
| 60.158.000036 | 36 µm  | -          | 305 mm | 40 mm  | ISO 3310/1 |
| 60.158.000038 | 38 µm  | -          | 305 mm | 40 mm  | ISO 3310/1 |
| 60.158.000040 | 40 µm  | -          | 305 mm | 40 mm  | ISO 3310/1 |
| 60.158.000045 | 45 µm  | -          | 305 mm | 40 mm  | ISO 3310/1 |
| 60.158.000050 | 50 µm  | -          | 305 mm | 40 mm  | ISO 3310/1 |
| 60.158.000053 | 53 µm  | -          | 305 mm | 40 mm  | ISO 3310/1 |
| 60.158.000056 | 56 µm  | -          | 305 mm | 40 mm  | ISO 3310/1 |
| 60.158.000063 | 63 µm  | -          | 305 mm | 40 mm  | ISO 3310/1 |
| 60.158.000071 | 71 µm  | -          | 305 mm | 40 mm  | ISO 3310/1 |
| 60.158.000075 | 75 µm  | -          | 305 mm | 40 mm  | ISO 3310/1 |
| 60.158.000080 | 80 µm  | -          | 305 mm | 40 mm  | ISO 3310/1 |
| 60.158.000090 | 90 µm  | -          | 305 mm | 40 mm  | ISO 3310/1 |
| 60.158.000100 | 100 µm | -          | 305 mm | 40 mm  | ISO 3310/1 |
| 60.158.000106 | 106 µm | -          | 305 mm | 40 mm  | ISO 3310/1 |
| 60.158.000112 | 112 µm | -          | 305 mm | 40 mm  | ISO 3310/1 |
| 60.158.000125 | 125 µm | -          | 305 mm | 40 mm  | ISO 3310/1 |
| 60.158.000140 | 140 µm | -          | 305 mm | 40 mm  | ISO 3310/1 |
| 60.158.000150 | 150 µm | -          | 305 mm | 40 mm  | ISO 3310/1 |
| 60.158.000160 | 160 µm | -          | 305 mm | 40 mm  | ISO 3310/1 |
| 60.158.000180 | 180 µm | -          | 305 mm | 40 mm  | ISO 3310/1 |
| 60.158.000200 | 200 µm | -          | 305 mm | 40 mm  | ISO 3310/1 |
| 60.158.000212 | 212 µm | -          | 305 mm | 40 mm  | ISO 3310/1 |
| 60.158.000224 | 224 µm | -          | 305 mm | 40 mm  | ISO 3310/1 |
| 60.158.000250 | 250 µm | -          | 305 mm | 40 mm  | ISO 3310/1 |
| 60.158.000280 | 280 µm | -          | 305 mm | 40 mm  | ISO 3310/1 |

|               |         |   |        |       |            |
|---------------|---------|---|--------|-------|------------|
| 60.158.000300 | 300 µm  | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.000315 | 315 µm  | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.000355 | 355 µm  | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.000400 | 400 µm  | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.000425 | 425 µm  | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.000450 | 450 µm  | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.000500 | 500 µm  | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.000560 | 560 µm  | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.000600 | 600 µm  | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.000630 | 630 µm  | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.000710 | 710 µm  | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.000800 | 800 µm  | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.000850 | 850 µm  | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.000900 | 900 µm  | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.001000 | 1.00 mm | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.001120 | 1.12 mm | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.001180 | 1.18 mm | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.001250 | 1.25 mm | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.001400 | 1.40 mm | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.001600 | 1.60 mm | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.001700 | 1.70 mm | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.001800 | 1.80 mm | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.002000 | 2.00 mm | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.002240 | 2.24 mm | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.002360 | 2.36 mm | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.002500 | 2.50 mm | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.002800 | 2.80 mm | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.003150 | 3.15 mm | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.003350 | 3.35 mm | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.003550 | 3.55 mm | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.004000 | 4.00 mm | - | 305 mm | 40 mm | ISO 3310/1 |

|               |          |   |        |       |            |
|---------------|----------|---|--------|-------|------------|
| 60.158.004500 | 4.50 mm  | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.004750 | 4.75 mm  | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.005000 | 5.00 mm  | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.005600 | 5.60 mm  | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.006300 | 6.30 mm  | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.006700 | 6.70 mm  | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.007100 | 7.10 mm  | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.008000 | 8.00 mm  | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.009000 | 9.00 mm  | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.009500 | 9.50 mm  | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.010000 | 10.00 mm | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.011200 | 11.20 mm | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.012500 | 12.50 mm | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.013200 | 13.20 mm | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.014000 | 14.00 mm | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.016000 | 16.00 mm | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.018000 | 18.00 mm | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.019000 | 19.00 mm | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.020000 | 20.00 mm | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.022400 | 22.40 mm | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.025000 | 25.00 mm | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.026500 | 26.50 mm | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.028000 | 28.00 mm | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.031500 | 31.50 mm | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.035500 | 35.50 mm | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.037500 | 37.50 mm | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.040000 | 40.00 mm | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.045000 | 45.00 mm | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.050000 | 50.00 mm | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.053000 | 53.00 mm | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.056000 | 56.00 mm | - | 305 mm | 40 mm | ISO 3310/1 |

|               |           |   |        |       |            |
|---------------|-----------|---|--------|-------|------------|
| 60.158.063000 | 63.00 mm  | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.071000 | 71.00 mm  | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.075000 | 75.00 mm  | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.080000 | 80.00 mm  | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.090000 | 90.00 mm  | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.100000 | 100.00 mm | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.106000 | 106.00 mm | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.112000 | 112.00 mm | - | 305 mm | 40 mm | ISO 3310/1 |
| 60.158.125000 | 125.00 mm | - | 305 mm | 40 mm | ISO 3310/1 |