HPC – HIGH PERFORMANCE COUNTING

Current Counting Discs Catalogue

köster
Maschinen- und Werkzeugbau

Type Rotation direction	Koester Part No.	Adapter Part No.	Alternative Part No.
R6.5 119.6	SST · SEG 6 · Ø 119.6 · 13° · GSM 70-120 · 18.6 · C · +0 -1 · R L		
Clockwise	KPN-A01-010-R	KPN-A15-010-RV-R	10.0101046.R119.6
Counterclockwise	KPN-A01-010-L	KPN-A15-010-LV-LD	10.0101046.L119.6
V8	SST · SEG 6 · Ø 119.6 · 13° · GSM 50-120 · 18.6 · C · +0 -1 · R L		
Clockwise	KPN-A01-080-R	KPN-A15-010-RV-R	10.0101046.R119.6/13V8
Counterclockwise	KPN-A01-080-L	KPN-A15-010-LV-LD	10.0101046.L119.6/13V8
V8 40 gr.	SST · SEG 6 · Ø 119.6 · 13° · GSM 40-110 · 18.6 · C · +0 -1 · R		
Clockwise	KPN-A01-081-R	KPN-A15-010-RV-R	10.0101046.R119.6V8_40GR
V9	SST · SEG 3 · Ø 129.6 · 13° · GSM 50-160 · 24.1 · C · +0 -2.5 · R L		
Clockwise	KPN-A01-090-R	KPN-A15-010-RV-R	10.0101046.R129.6V9
Counterclockwise	KPN-A01-090-L	KPN-A15-010-LV-LD	10.0101046.L129.6V9
V10	SST · SEG 6 · Ø 129.6 · 13° · GSM 60-115 · 24.1 · C · +0 -1 · R L		
Clockwise	KPN-A01-100-R	KPN-A15-010-RV-R	10.0101046.R129.6V10
Counterclockwise	KPN-A01-100-L	KPN-A15-010-LV-LD	10.0101046.L129.6V10
V11	SST · SEG 3 · Ø 129.6 · 13° · GSM 60-120 · 24.1 · C · +0 -2.5 · R L		
Clockwise	KPN-A01-110-R	KPN-A15-010-RV-R	10.0101046.R129.6V11
Counterclockwise	KPN-A01-110-L	KPN-A15-010-LV-LD	10.0101046.L129.6V11
V12	SST · SEG 3 · Ø 129.6 · 13° · GSM 90-250 · 24.1 · C · +0 -2.5 · R L		
Clockwise	KPN-A01-120-R	KPN-A15-010-RV-R	10.0101046.R129.6V12
Counterclockwise	KPN-A01-120-L	KPN-A15-010-LV-LD	10.0101046.L129.6V12

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Type Rotation direction	Koester Part No.	Adapter Part No.	Alternative Part No.
V13	SST · SEG 3 · Ø 139 · 10° · GSM 120-300 · 29.2 · C · +0 -1 · R/L		
Clockwise	KPN-A01-130-R	KPN-A15-010-RV-R	10.0101046.R139V13
Counterclockwise	KPN-A01-130-L	KPN-A15-010-LV-LD	10.0101046.L139V13
V15	SST · SEG 4 · Ø 158 · 8° · GSM 40-150 · 29.2 · C · +0 -2 · R		
Clockwise	KPN-A01-150-R	KPN-A15-010-RV-R	10.0101046.R139V15
C1	HPC ready · SST · SEG 6 · Ø 112 · 13° · GSM 35-70 · 14.4 · C · +0 -0.5 · R		
Clockwise	KPN-A02-001-R	KPN-A15-020-RV-RC1	10.0101046.R112/13_C1
C2	HPC ready · SST · SEG 6 · Ø 129.6 · 10° · GSM 30-150 · 24.1 · C · +0 -3 · R/L		
Clockwise	KPN-A02-002-R	KPN-A15-020-RV-RC2	10.0101046.R129.6/10_C2
Counterclockwise	KPN-A02-002-L	KPN-A15-020-LV-LC2	10.0101046.L129.6/10_C2
C3	HPC ready · SST · SEG 6 · Ø 119.6 · 10° · GSM 35-140 · 18.6 · C · +0 -2.5 · R/L		
Clockwise	KPN-A02-003-R	KPN-A15-020-RV-RC3	10.0101046.R119.6_C3
Counterclockwise	KPN-A02-003-L	KPN-A15-020-LV-LC3	
C4	HPC ready · SST · SEG 3 · Ø 158 · 8° · GSM 250->600 · 65.5 · C · +0 -3 · R		
Clockwise	KPN-A02-004-R	KPN-A15-020-RV-RC4	
Counterclockwise			
C6	HPC ready · SST · SEG 6 · Ø 129.6 · 10° · GSM 50-200 · 24.1 · C · +0 -2 · R/L		
Clockwise	KPN-A02-006-R	KPN-A15-020-RV-RC2	
Counterclockwise	KPN-A02-006-L	KPN-A15-020-LV-LC2	

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Type Rotation direction	Koester Part No.	Adapter Part No.	Alternative Part No.
C7	HPC ready · SST · SEG 6 · Ø 158 · 8° · GSM 120-350 · 36.6 · C · +0 -3 · R		
Clockwise	KPN-A02-007-R	KPN-A15-020-RV-RC7	
S1	HPC ready · SST · SEG 4 · Ø 139 · 9° · GSM 200-500 · 25.8 · E · +0 -1.5 · R/L		
Clockwise	KPN-A03-001-R	KPN-A15-030-RV-RS1	10.010101046.R139S1
Counterclockwise	KPN-A03-001-L	KPN-A15-030-RV-LS1	10.010101046.L139S1
S2	HPC ready · SST · SEG 5 · Ø 119.6 · 8° · GSM 35-115 · 16.1 · E · +0 -1.5 · R/L		
Clockwise	KPN-A03-002-R	KPN-A15-030-RV-RS2	10.010101046.R119.6/8_S2
Counterclockwise	KPN-A03-002-L	KPN-A15-030-RV-LS2	10.010101046.L119.6/8_S2
S3	HPC ready · SST · SEG 5 · Ø 119.6 · 8° · GSM 40-115 · 16.1 · E · +0 -2.5 · R/L		
Clockwise	KPN-A03-003-R	KPN-A15-030-RV-RS3	10.010101046.R119.6/8_S3
Counterclockwise	KPN-A03-003-L	KPN-A15-030-RV-LS3	10.010101046.L119.6/8_S3
S4	HPC ready · SST · SEG 6 · Ø 129.6 · 8° · GSM 40-115 · 21.1 · E · +0 -3 · R/L		
Clockwise	KPN-A03-004-R	KPN-A15-030-RV-RS4	10.010101046.R129.6/8_S4
Counterclockwise	KPN-A03-004-L	KPN-A15-030-LV-LS4	10.010101046.L129.6/8_S4
S5	HPC ready · SST · SEG 4 · Ø 129.6 · 8° · GSM 40-115 · 21.1 · E · +0 -4 · R/L		
Clockwise	KPN-A03-005-R	KPN-A15-030-RV-RS5	10.010101046.R129.6/8_S5
Counterclockwise	KPN-A03-005-L	KPN-A15-030-LV-LS5	10.010101046.L129.6/8_S5
S6	HPC ready · SST · SEG 4 · Ø 158 · 8° · GSM 40-200 · 31 · E · +4 -4 · R/L		
Clockwise	KPN-A03-006-R	KPN-A15-030-RV-RS6	10.0101046.R158/8_S6
Counterclockwise	KPN-A03-006-L	KPN-A15-030-LV-LS6	10.0101046.L158/8_S6

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Type Rotation direction	Koester Part No.	Adapter Part No.	Alternative Part No.	HPC ready	SST	SEG	Ø	8°	GSM	31	E	+4 -4	R L
S7				HPC ready	SST	SEG 4	Ø 158	8°	GSM 35-150	31	E	+4 -4	R L
Clockwise	KPN-A03-007-R	KPN-A15-030-RV-RS6	10.0101046.R158/8_S7										
Counterclockwise	KPN-A03-007-L	KPN-A15-030-LV-LS6	10.0101046.L158/8_S7										
S8				HPC ready	SST	SEG 5	Ø 136	8°	GSM 35-170	20	E	+2 -2.5	R L
Clockwise	KPN-A03-008-R	KPN-A15-030-RV-RS8											
Counterclockwise	KPN-A03-008-L	KPN-A15-030-LV-LS8											
S9				HPC ready	SST	SEG 4	Ø 158	8°	GSM 70-270	31	E	+3 -3	R L
Clockwise	KPN-A03-009-R	KPN-A15-030-RV-RS9											
S10				HPC ready	SST	SEG 4	Ø 158	5°	GSM 200->500	31	E	+4 -4	R
Clockwise	KPN-A03-010-R	KPN-A15-030-RV-RS10											
S11				HPC ready	SST	SEG 4	Ø 158	5°	GSM 300->500	31	E	+3 -3	R
Clockwise	KPN-A03-011-R	KPN-A15-030-RV-RS10											
SO1				SST	SEG 2	Ø 136	GSM 35-170	20	E	+3 -2,5	R		
Clockwise	KPN-A05-001-R-02	KPN-A15-050-RV-RSO1											

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Icon Legend and Explanation

HPC ready — In comparison to former disc shapes completely new design enabling higher counting speed and smoother operation.

SST — Used material for disc manufacturing Stainless Steel as consequence no treatment as for example chrome coating used only surface polishing applied resulting into higher durability and longer lifespan.

SEG x — Number of segments resulting the sheets amount counted within one single revolution. The objective of a new disc design is always to increase the number of segments decreasing the disc diameter thus reducing the friction to the substrate during the revolutions and balancing the shortage of the suction and separation area due to the number of segments.

Ø xxx — Disc diameter in “mm”. As bigger the disc diameter as higher the ream or layer sheet to sheet misalignment tolerance which can be processed. Increasing of disc diameter must be balanced to reduce the friction to the substrate during the revolutions.

x° — Pitch angle of the disc top in relation to the disc bottom in degrees. Using advanced CAD software and design models as well as high precise CNC manufacturing machines allows extremely reduced angles decreasing the substrate deformation and the friction during counting revolutions.

GSM xx-xxx — GSM range in “g/m²”. During our test series determined GSM range values.

xx — Disc immersion depth in “mm” inside the substrate ream or layer during counting.

C — Disc counting position “C” for corner counting.

E — Disc counting position “E” for edge counting.

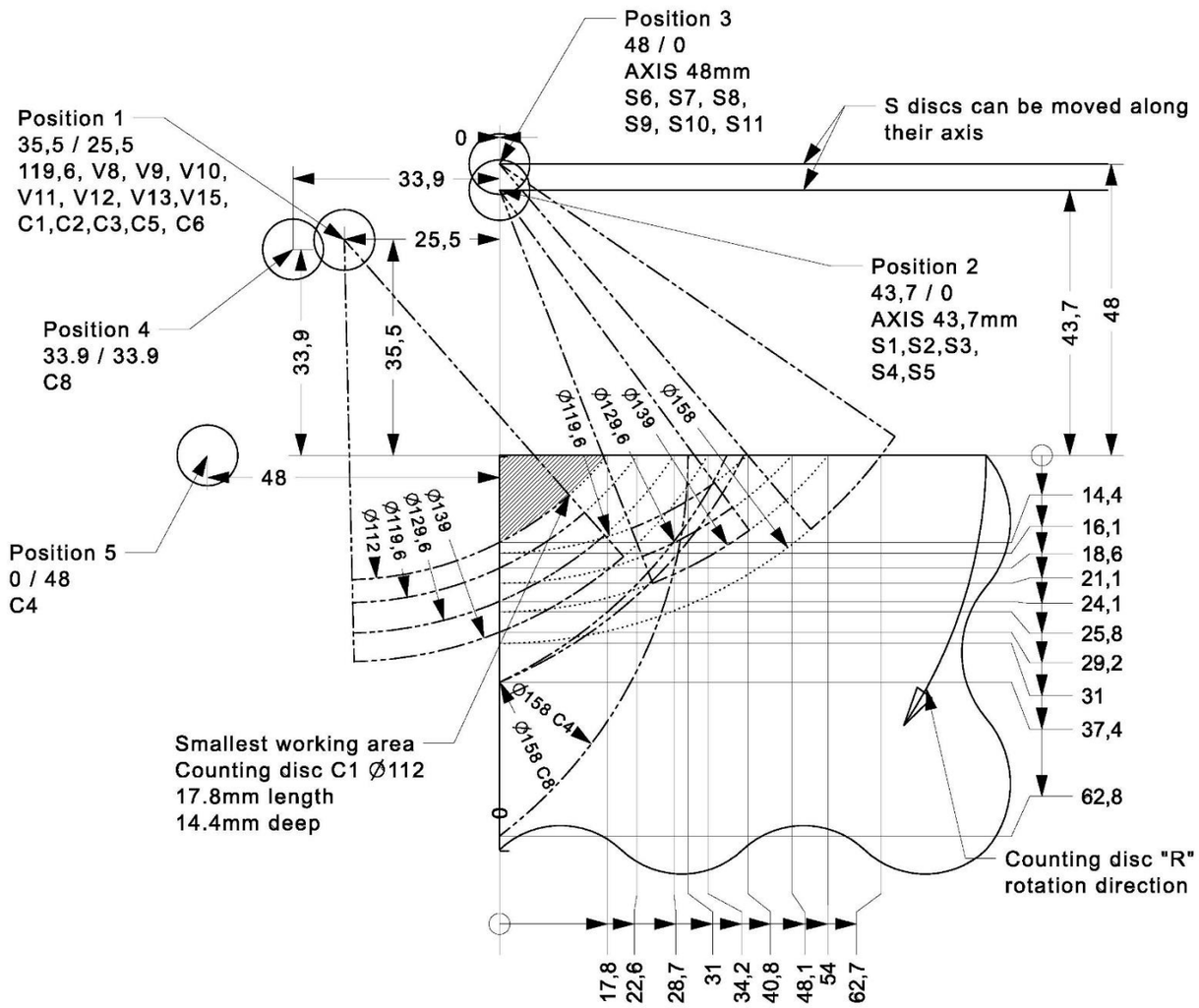
+x -x — Ream or layer sheet to sheet misalignment tolerance which can be processed in “mm”.

R L — Available rotation directions “R” for clockwise and “L” for counterclockwise.

Specific Explanations

R6.5 119.6	In production use since 1991. Initial designation 117.6. Typical application, counting banknotes.
V8	In production use since 2002. First disc design with micro suction holes instead of suction slots.
V8 40 gr.	Enhanced design of the V8 disc. Grammages up to min. 40 GSM could be counted - a breakthrough in the processing of low GSM values.
V9	In production use since 2002. First disc design that processes and counts higher sheet-to-sheet offset tolerances and an extended product range almost independent of substrate.
V12	First disc for processing higher GSM values.
V13	First disc with flat suction profile for high GSM values.
C1	Designed for processing very small formats, e.g. format size 9x32 mm in combination with our HPC counting machine B03.
C3	Latest design, the successor of the 119.6, V8, V8 40 gr. Larger GSM range combined with smaller diameter.
S6	Counting on the side edge of the product. Increased distance to the transfer block. Free choice of counting area on the product side edge. Simplification of the layer separation for loading purposes.
S01	Developed to recognize printed codes on the side edge of the product. The world's first counting disc with an enlarged opening gap.

Counting Discs Positions Overview



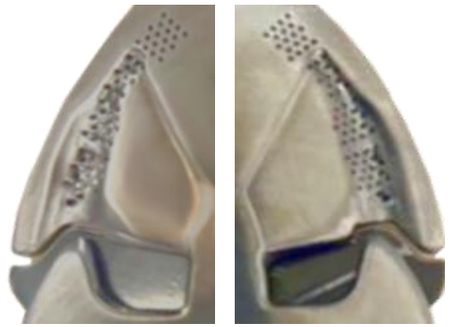
Features of Koester HPC Discs

The Original

- Precise, automated CNC production
- Constant geometry
- Constant working noise
- Surface plane ground
- Surface mirror polished

- Identical segments
- Identical fillets
- Identical drilling pattern
- Identical function of all segments
- Guaranteed repeatability

The Copy



Features of Koester HPC Discs

The Original

- Disc type and part number
- Koester logo as of 2018 before without logo
- Laser-welded disc body
- Wing ring screwed

- Guaranteed manufacturing precision
- Guaranteed concentricity and axial runout

The Copy

Features of Koester HPC Discs

The Original
Koester discs as of 2018 with logo before without logo

The Manipulation
Genuine Koester discs supplied by the competitor as of 2018

- Logo removed by competitor

Features of Koester HPC Discs

The Original
Discs supplied by Koester

The Manipulation
Genuine Koester discs supplied by the competitor

- Logo label cut off and removed

Counting Discs – Since 1991

HPC – HIGH PERFORMANCE COUNTING

Basic Information

Counting Discs:

- The details of the GSM values are based on experience and tests. Depending on the product rigidity, these values may differ.
- Older produced counting discs for corner position are designated by 1xx,x for the diameter in "mm" and / or "V8 - V15" depending on the type.
- Newly produced counting discs for corner position are designated by "C1-Cx“ depending on the type.
- Newly produced counting discs for edge position are designated by "S1-Sx" depending on the type.
- Warranty for the lifetime of the counting discs is not granted as the abrasive wear depends highly to the processed product.

Counting Machines:

- Maximum counting speed refers generally to the rated maximum rpm value and the machine design.
- It is not granted that maximum speed can be attended using all kind of substrates / materials.
- Warranty time 12 months upon issuing of the acceptance certificate.
- Warranty extension 24 months optionally available.
- Warranty coverage except wear parts.

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Maschinen- und Werkzeugbau

Made in Germany –
Made for the world

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