pro **MATRIX**

Standardised Hot Halves

Complete. Fast. Process reliable.

EWIKON

- **Perfect process control**
- **Optimum temperature control right to the tip**
- **Flexibly configurable**
- **Natural full balancing with HPS III-TE manifold technology**
- **High ease of maintenance and high durability**
- **Fully integrated hot runner system. Wiring according to customer specification. Comprehensive documentation. CE-compliant.**

pro **MATRIX**

Complete. Fast. Process reliable.

The standardised multi-cavity hot halves of the pro MATRIX series are designed on the basis of 4-cavity clusters, with pitch dimensions that can be individually defined within specified limits. The design and production-optimised layout enables particularly fast project lead times with high cost efficiency. Proven technical components guarantee a high level of process reliability. For demanding applications, further customisation to meet specific requirements is possible with additional technology options.

Available versions:

16-drop	24-drop
32-drop	64-drop

Extended warranty and increased efficiency with precise control technology

EWIKON offers an extended warranty of 3 years, if your hot half is purchased with the matching pro CONTROL control technology. This enables reliable and precise control of your hot runner system with extremely convenient operation. The fast control behaviour makes pro CONTROL the first choice for demanding multi-cavity applications. Integrated interfaces for optimum communication with the injection moulding machine as well as extensive support and error detection functions complete the equipment.

pro **CONTROL**

OPC UA

Customised to your requirements

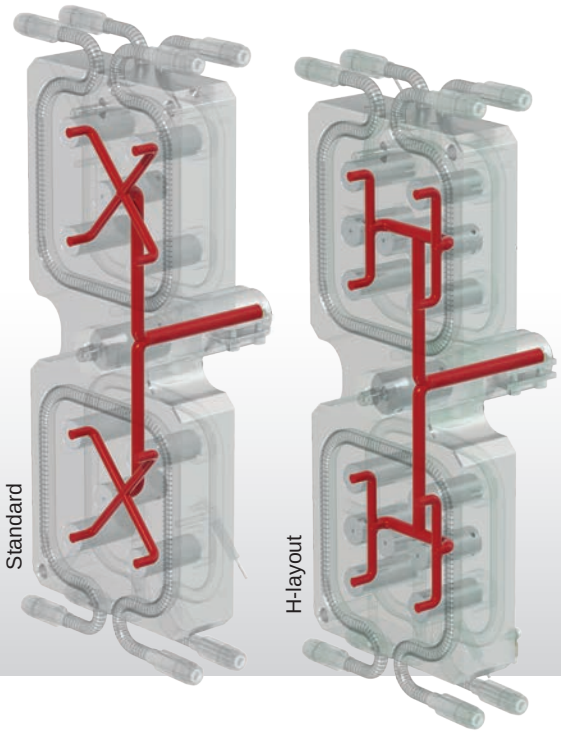
Increased process reliability

Valve gate with single drives

- Drive pistons integrated in the clamping plate.
- Pneumatic actuation.
- High-precision sealing elements with sealing cone directly at the melt channel. Practically gap-free sealing.
- Valve pin replacement in closed mould possible.

Synchronous plate valve gate

- Absolutely synchronous valve pin actuation.
- Uniform cavity filling with maximum repeatability.
- Ideal for the production of articles with small shot weights.
- Pneumatic synchronous plate actuation via pistons in the clamping plate.
- Overload safety device to protect the valve pins as an additional option.



Simplified maintenance

Nozzles for front installation

- Easy maintenance or replacement due to easy access to the nozzle after removal of the contour plate.

Optimised colour changes

HPS III-T manifold technology

- EWIKON element technology. Streamlined flow channels without sharp corners.
- Smooth melt flow for sensitive materials and particularly quick colour changes.

Flow channels in H-layout

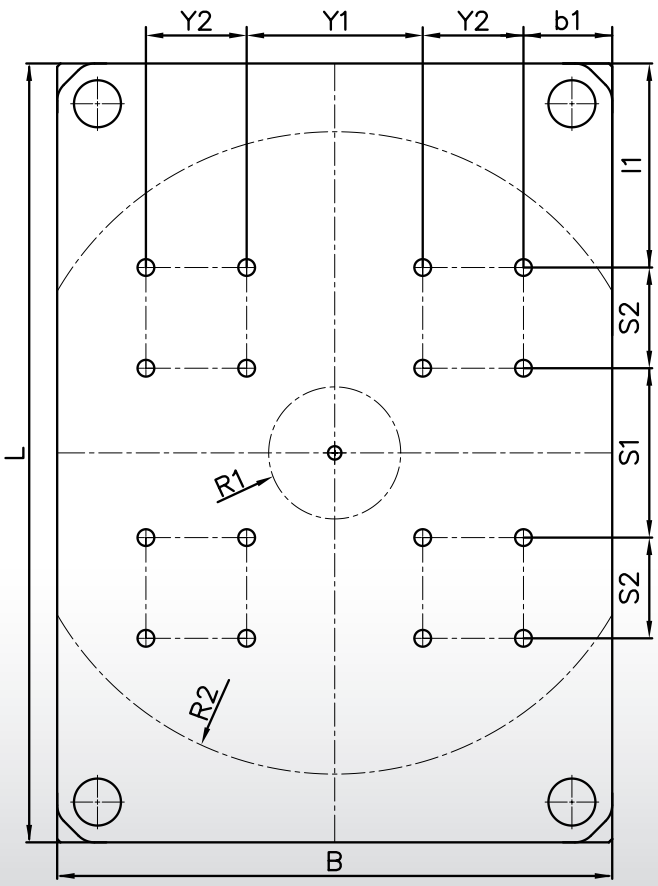
- Further improved balance (please contact EWIKON).

Complete process control

smart CONTROL records, monitors, analyses and logs all relevant data in the networked injection moulding process. This enables transparent, efficient and safe processes as well as simplified process optimisation and quality control.

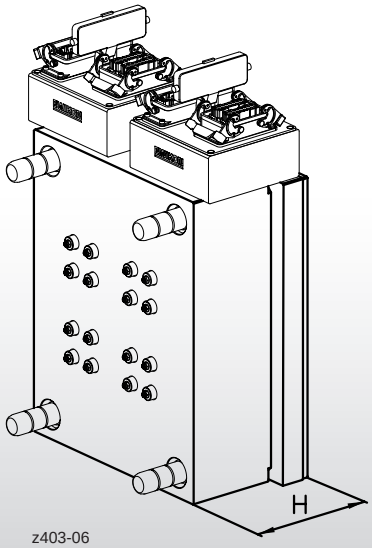
pro MATRIX	Standard	Option
Gating options	Open gating / Valve gating	–
Manifold technology		
Manifold system	HPS III-TE (X-layout)	HPS III-T (X-layout) HPS III-T (H-layout)
Nozzle technology		
Flow channel diameter	4.5 mm / 6 mm	–
Nozzle lenghts	Standard nozzle lengths according to EWIKON main catalogue	–
Nozzle installation	Standard installation	Front installation
Tip versions	Heat conductive tips / valve gate tip inserts according to EWIKON main catalogue	–
Valve gate technology		
Drive	Single drive units in clamping plate, pneumatic actuation Synchronous plate, pneumatic actuation	Overload safety device for synchronous plate
Exchange inserts / wear protection	–	Gate exchange inserts with gate contour
Mould design		
Mould plate quality	1.2312	1.2085
Guide elements	EWIKON standard	Other guide systems on request
Wiring		
Plug version and pin assignment	According to customer requirements	–
Cooling connections	DME / Festo / Hasco / Stäubli	–

16-drop | Open gating | Valve gating



z403-01

Within defined limits (R1 / R2 / S1 min. / Y1 min.), the pitch dimensions S2 and Y2 can vary. The ratio S2/Y2 must be observed.
This must be between 0.6 and 1.7.



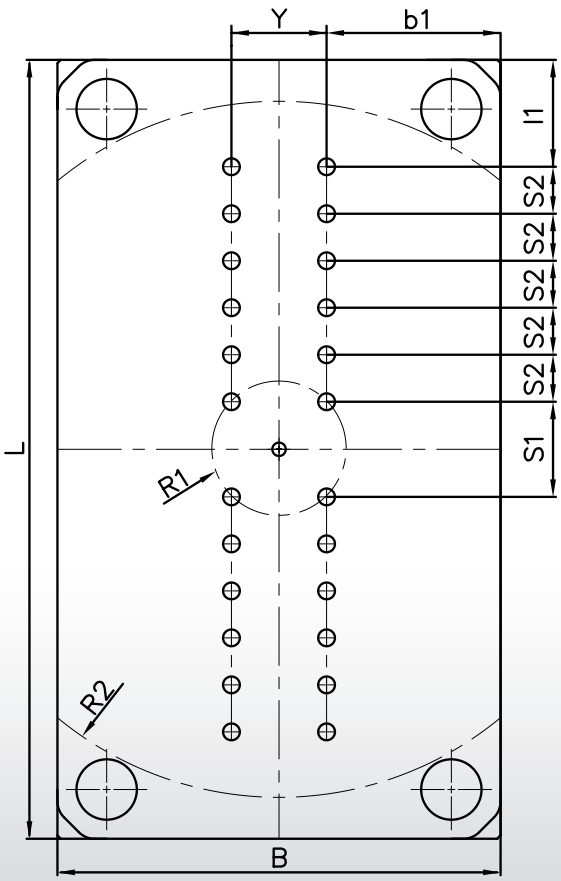
z403-06

pro MATRIX Hot half 16-drop | Manifold TE / T | Nozzle 4.5 mm / 6 mm

	K26100-16 Open gating		K26101-16 Valve gating with single drives	K26102-16 Valve gating with synchronous plate
	TE manifold	T manifold		
S1 min.	80 mm	85 mm	105 mm	80 mm
S2 min.	42 mm	42 mm	48 mm	45 mm
Y1 min.	42 mm	53 mm	86 mm	86 mm
Y2 min.	42 mm	42 mm	52 mm	45 mm
R1	45 mm	50 mm	68 mm	59 mm
R2	287 mm	287 mm	287 mm	287 mm
L min.	446 mm	446 mm	496 mm	496 mm
B min.*	346 mm	346 mm	446 mm	396 mm
L max.	846 mm	846 mm	846 mm	896 mm
B max.*	746 mm	746 mm	646 mm	846 mm
l1 min.	141 mm	138 mm	148 mm	163 mm
b1 min.	110 mm	104 mm	128 mm	110 mm
H min.	138,5 mm	138,5 mm	158,5 mm	234,5 mm

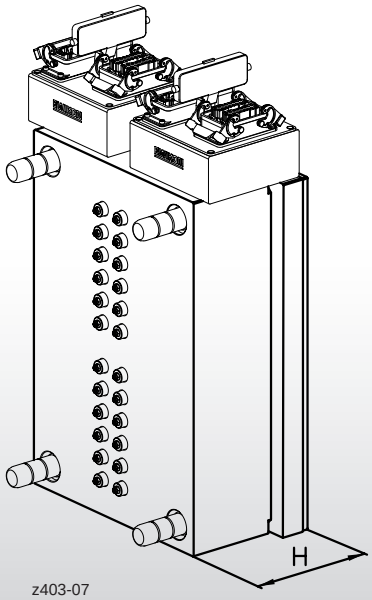
* Clamping plate: B min. / B max. + 50 mm

24-drop | Layout 1 | Open gating



z403-02

Within defined limits (R1 / R2 / S1 min. / Y min.) the pitch dimension S2 can vary.



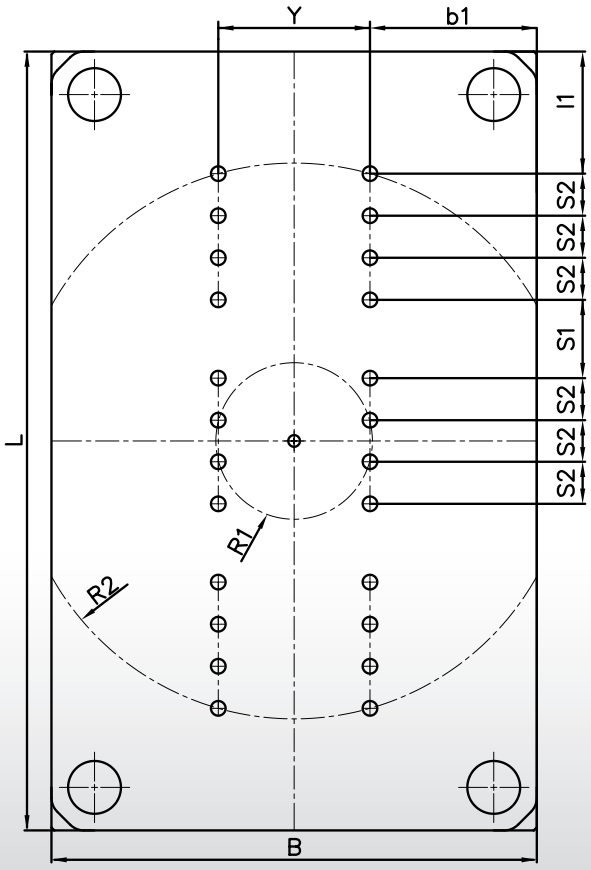
z403-07

pro MATRIX Hot half 24-drop | Manifold TE | Nozzle 4.5 mm / 6 mm

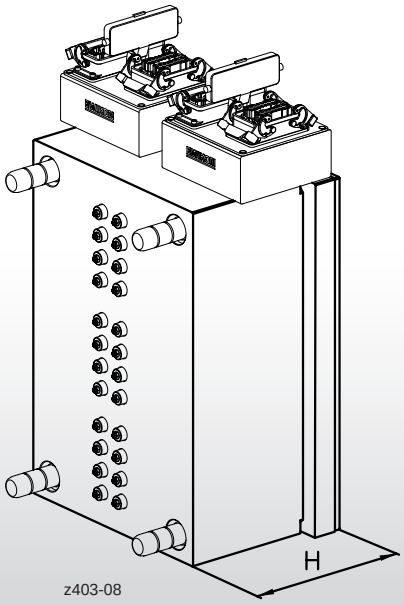
	K26100-24 Open gating
S1 min.	70 mm
S2 min.	42 mm
Y min.	80 mm
R1	53 mm
R2	311 mm
L min.	696 mm
B min.*	396 mm
L max.	1200 mm
B max.*	1100 mm
l1 min.	103 mm
b1 min.	158 mm
H min.	148,5 mm

* Clamping plate: B min. / B max. + 50 mm

24-drop | Layout 2 | Open gating | Valve gating



z403-03



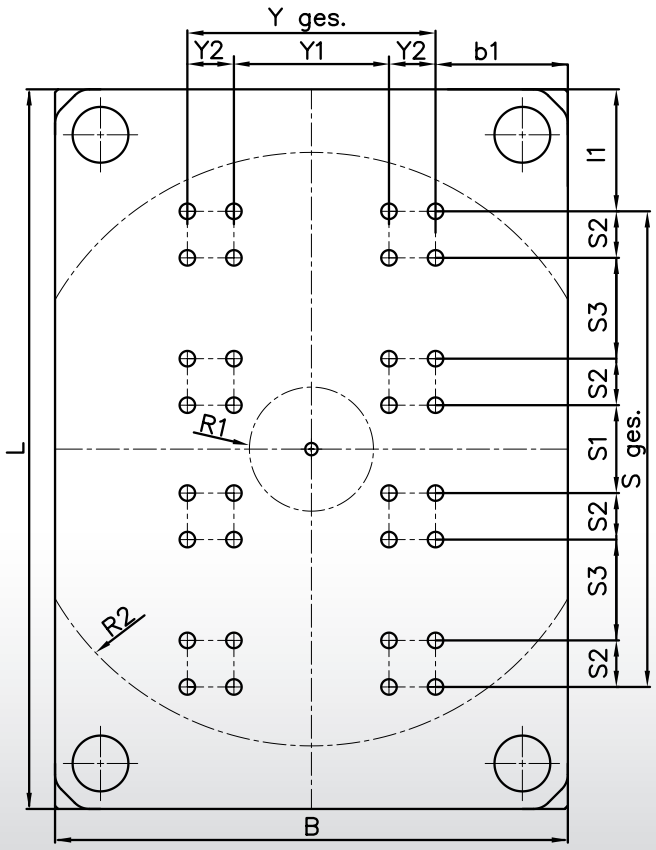
z403-08

pro MATRIX Hot half 24-drop | Manifold TE / T | Nozzle 4.5 mm / 6 mm

	K26100-24 Open gating	K26102-24 Valve gating with synchronous plate
S1	68 mm	80 mm
S2	42 mm	42 mm
Y	160 mm	165 mm
R1	83 mm	85 mm
R2	380 mm	287 mm
L min.	796 mm	796 mm
B min.*	496 mm	496 mm
L max.	846 mm	846 mm
B max.*	496 mm	496 mm
l1	141 mm	129 mm
b1	168 mm	166 mm
H min.	168,5 mm	264,5 mm

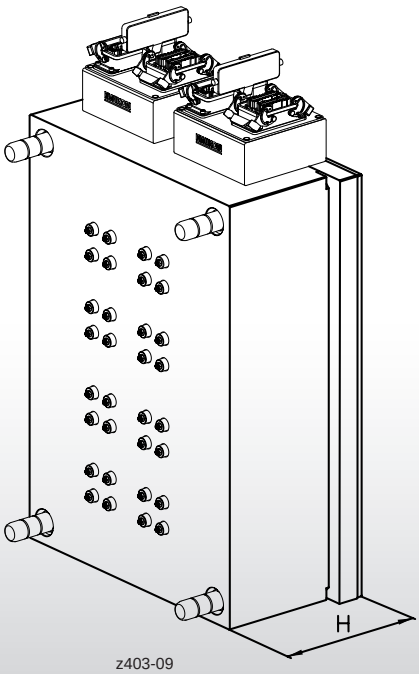
* Clamping plate: B min. / B max. + 50 mm

32-drop | Open gating | Valve gating



z403-04

Within defined limits (R1 / R2 / S1 min. / S3 min. / Y1 min.), the pitch dimensions S2 and Y2 can vary. The ratio S2/Y2 must be observed.
This must be between 0.6 and 1.7.



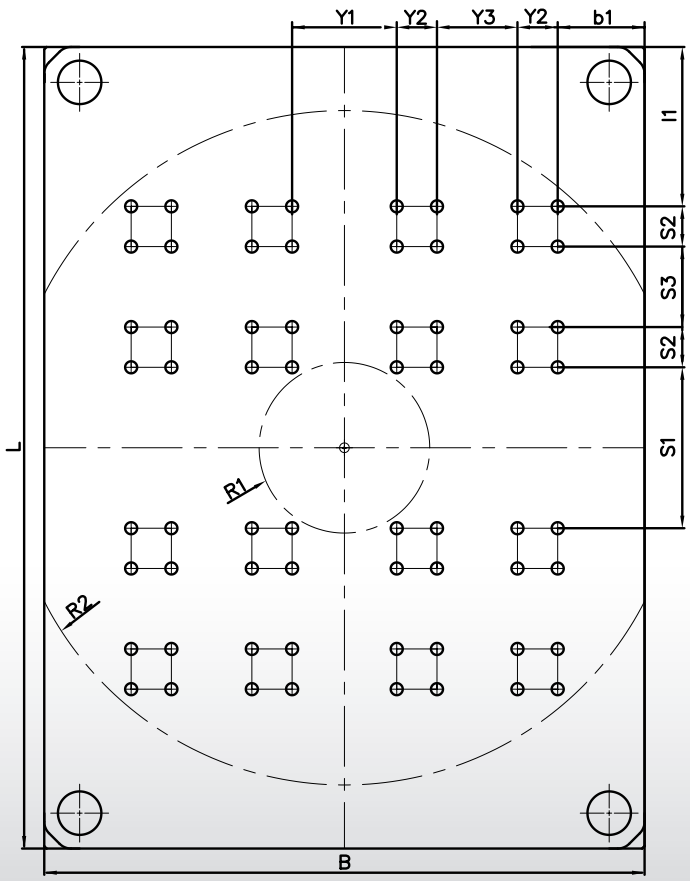
z403-09

pro MATRIX Hot half 32-drop | Manifold TE / T | Nozzle 4.5 mm / 6 mm

	K26100-32 Open gating	K26101-32 Valve gating with single drives	K26102-32 Valve gating with synchronous plate
S1 min.	85 mm	105 mm	85 mm
S2 min.	42 mm	48 mm	45 mm
S3 min.	85 mm	86 mm	85 mm
Y1 min.	85 mm	86 mm	85 mm
Y2 min.	42 mm	52 mm	45 mm
R1	60 mm	68 mm	60 mm
R2	305 mm	287 mm	287 mm
L min.	646 mm	746 mm	696 mm
B min.*	446 mm	446 mm	496 mm
L max.	846 mm	796 mm	846 mm
B max.*	746 mm	546 mm	746 mm
l1 min.	112 mm	138 mm	130 mm
b1 min.	138 mm	128 mm	160 mm
H min.	168,5 mm	178,5 mm	264,5 mm

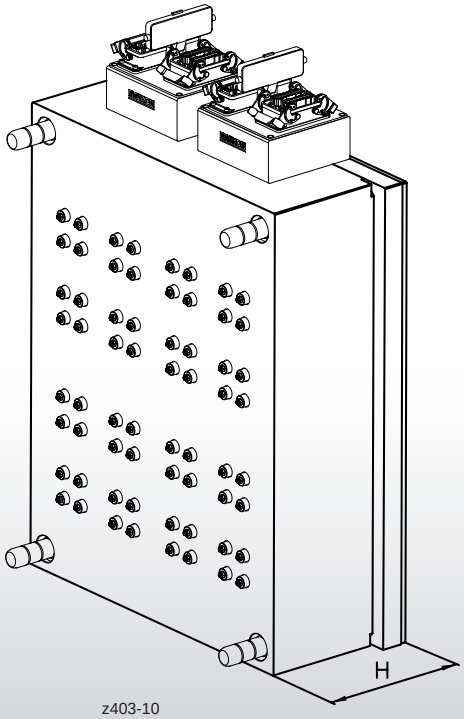
* Clamping plate: B min. / B max. + 50 mm

64-drop | Open gating | Valve gating



z403-05

Within defined limits (R1 / R2 / S1 min. / S3 min. / Y1 min. / Y3 min.), the pitch dimensions S2 and Y2 can vary. The ratio S2/Y2 must be observed.
This must be between 0.6 and 1.7.



z403-10

pro MATRIX Hot half 64-drop | Manifold TE / T | Nozzle 4.5 mm / 6 mm

	K26100-64 Open gating	K26101-64 Valve gating with single drives	K26102-64 Valve gating with synchronous plate
S1 min.	156 mm	156 mm	156 mm
S2 min.	42 mm	48 mm	55 mm
S3 min.	85 mm	85 mm	85 mm
Y1 min.	90 mm	150 mm	110 mm
Y2 min.	42 mm	48 mm	45 mm
Y3 min.	85 mm	85 mm	90 mm
R1	90 mm	108 mm	95 mm
R2	430 mm	375 mm	386 mm
L min.	896 mm	996 mm	996 mm
B min.*	746 mm	796 mm	796 mm
L max.	1200 mm	1200 mm	1200 mm
B max.*	1100 mm	1100 mm	1100 mm
l1 min.	201 mm	239 mm	225 mm
b1 min.	159 mm	142 mm	153 mm
H min.	208,5 mm	208,5 mm	315,5 mm

* Clamping plate: B min. / B max. + 50 mm

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