Plug housing from ATI Accurate Technologies

PA 1101 & PA 1102 black

Impact-Resistant Plastic Materials – Flexible, Chemical-Resistant and Made from Renewable Raw Materials

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PA 1101 & PA 1102 black: Impact-Resistant, Flexible, Chemical-Resistant and Eco-Friendly

PA 1101 is a whitish polyamide 11-powder. PA 1102 black is a mass-coloured black polyamide 11-powder. Both materials are optimised for use in Additive Manufacturing. They were built with a layer thickness of 0.12 mm.

Interesting profile of properties for mechanically stressed components

- High elongation at break
- Flexibility
- High impact-resistance
- PA 1102 black is mass-coloured and therefore scratch-proof
- Excellent resistance to chemicals (particularly hydrocarbons, aldehydes, ketones, mineral bases and salts, alcohols, fuels and detergents as well as oils and greases)
- Eco-friendly: Materials are made from renewable raw materials (castor oil)
- Ductile fracture behaviour: does not splinter
- Medical approvals: cytotoxicity test passed acc. to DIN EN ISO 10993-5

PA 1101 & PA 1102 black are very suitable for:

- Small to medium-sized components
- Comparatively low wall thicknesses
- Lattice structures

PA 1101 & PA 1102 black are less suitable for:

- Components susceptible to deformation: e.g. large housings, straight edges
- Solid components: e. g. compact block

Do you have questions on possible uses? The EOS application specialists will be pleased to help and make a test part for you too. For inquiries please contact info@eos.info.
Technical information and material data sheets are available at http://www.eos.info/material-p

Versatile uses

CANary Interface Module from ATI Accurate Technologies

Orthosis

Raceware/3T RPD mount for a navigation device

Smartphone cases

Functional parts

- Parts that are exposed to impact and deformation forces
- Mechanically stressed functional prototypes and serial products with permanently mobile parts (e.g. film hinges)
- Well suited for abrasively stressed visible parts (due to mass colouring of PA 1102 black the component does not change colour despite heavy use)

Medical

Patient-specific, exactly fitting and stable orthoses that do not splinter even under highest stresses (please note the medical approvals).

Lifestyle products

High elongation at break and great flexibility allow prototypes and functional small-scale series to be produced

Technical Requirements for the Use of PA 1101 & PA 1102 black on EOS Systems

Without maintenance or service contract

For customers without maintenance or service contract, we recommend the system be checked in advance by an EOS service engineer. A reference job should also be produced.

This means that only EOS systems with the following serial numbers can be upgraded:

FORMIGA P 100	EOSINT P 3	EOSINT P 7
Serial numbers SI 721 and higher	Serial numbers SI 404 and 405, SI 419 and higher	Serial numbers SI 316, SI 643 and higher

Maximum necessary upgrade:

FORMIGA P 100 SI number	721-1285
StarterKit PA 11 & PA 1102 black for PSW 3.3 Art.no. 1213-2830	■
Upgrade kit connector type Art.no. 1213-2851	■

EOSINT P 3 SI number	404-405	419-451	452	453-454	455-638	693-884	953-964	965	966-967	968-1521
PSW 3.2 + computer Art.no. 1201-7226	■	■		■						
Fluidisation, clocked upgrade kit P380i, P 385 Art.no. 1201-4608	■	■	■	■	■					
P 3 Upgrade kit for increasing removal chamber temperature, upgrade kit I Art.no. 1201-2550	■	■	■	■	■	■				
Blade cassette III (red) Art.no. 1201-7954								■		■

For EOSINT P 3 systems with SI numbers 1755 and higher, none of these upgrade kits apply.

An additional StarterKit for PA 11 & PA 1102 black is needed for EOSINT P 3 systems depending on the PSW version:

EOSINT P 3 PSW version	PSW 3.2	PSW 3.3	PSW 3.6
StarterKit PA 11 & PA 1102 black Art.on. 1201-2880	■		
StarterKit PA 11 & PA 1102 black Art.no. 1201-2830		■	
StarterKit PA 11 & PA 1102 black Art.no. 1201-2840			■

EOSINT P 7 SI number	316	643-647	648	696-802	848	850-851	852	853	854	ab 855
StarterKit PA 11 & PA 1102 black Art.no. 1214-2810		■		■						
StarterKit PA 11 & PA 1102 black Art.no. 1214-2840	■		■		■		■		■	
StarterKit PA 11 & PA 1102 black Art.no. 1214-2830						■		■		■
Blade cassette III (red) Art.no. 1218-0503	■	■	■	■	■	■	■	■	■	■

Requirements

Compared to PA12 the material requires a slightly higher process chamber temperature of 180°C to 195°, and for EOSINT P 3 systems a higher removal chamber temperature of 150°C.

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Status 02/2015. Technical data subject to change without notice. EOS is certified according to ISO 9001.

Checklist

If you want to know whether your system meets the technical requirements to use PA 1101 and PA 1102 black, simply to use this helpful checklist. It also enables us to provide you with a customized offer and speeds up order processing. Any questions? Your EOS service engineer will be happy to answer them.

Please forward the completed checklist to your EOS sales representative. Thank you very much.

Company:

Name:

E-mail:

Phone:

Serial numbers of the machines:

FORMIGA P 100	SI number(s):	.....	.....
EOSINT P 3	SI number(s):	.....	.....
EOSINT P 7	SI number(s):	.....	.....

Further information – for EOSINT P 3 and EOSINT P 7 systems:

a) Blade	SI	SI	SI	SI .....
Blade cassette III (red)	☐ Yes	☐ Yes	☐ Yes	☐ Yes
EOSINT P 3 (Art.no. 1201-7954)	☐ No	☐ No	☐ No	☐ No
EOSINT P 7 (Art.no. 1218-0503)	☐ Unknown	☐ Unknown	☐ Unknown	☐ Unknown

Further information – only for EOSINT P 3 systems:

b) PSW version	SI	SI	SI	SI .....
PSW < 3.2	☐	☐	☐	☐
PSW 3.2	☐	☐	☐	☐
PSW 3.3	☐	☐	☐	☐
PSW 3.6	☐	☐	☐	☐
PSW 3.7	☐	☐	☐	☐

please turn over

Upgrade kit – only for SI 404, SI 405 and SI 419 to SI 638

c) Upgrade kit	Distinctive feature	SI	SI	SI .....
Fluidization, clocked Upgrade kit for P 380i + P 385 (Art.no. 1201-4608)	 Control cabinet Time relay 	☐ Yes ☐ No ☐ Unknown	☐ Yes ☐ No ☐ Unknown	☐ Yes ☐ No ☐ Unknown

If "Unknown" an on-site test by a service engineer may be necessary.

Upgrade kit – only for SI 404, SI 405 and SI 419 to SI 884

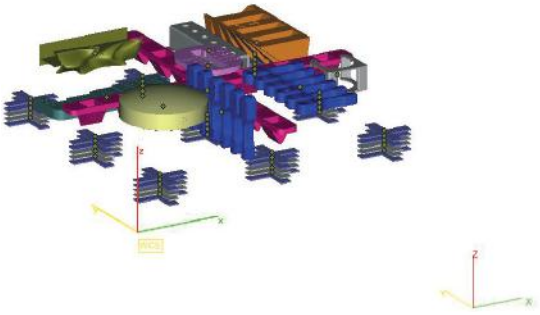
d) Upgrade kit	Distinctive feature	SI	SI	SI .....
P 3 Upgrade kit for increasing removal chamber temperature Upgrade kit I (Art.no. 1201-2550)	Removal chamber 	☐ Yes ☐ No ☐ Unknown	☐ Yes ☐ No ☐ Unknown	☐ Yes ☐ No ☐ Unknown

If "Unknown" an on-site test by a service engineer may be necessary.

Important Information Regarding Part Quality and Wear Parts

Thanks to extensive development work by EOS, you can also use PA 1101 & PA 1102 black on older systems. However, the quality of the part depends on the system generation: better results can be achieved on new systems (serial number SI 953 and higher for EOSINT P 3), particularly with respect to part warpage. Part quality is tested on the various system generations with different reference jobs.

Reference job: new systems



Reference job: old systems

The high temperatures may cause higher wear in all systems, resulting in more frequent replacement of wear parts.

Yes, I have taken note of the important information regarding part quality and wearing parts.

_____

Date, signature

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