

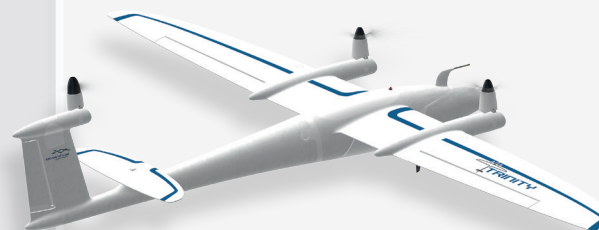
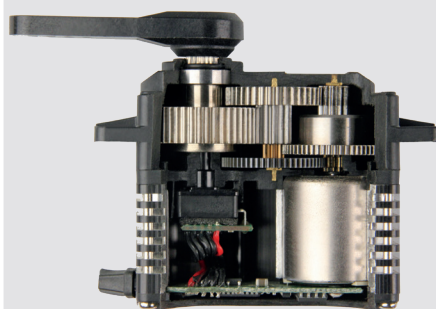
# MULTIPLEX<sup>®</sup>

## COMMERCIAL SOLUTIONS

INNOVATIVE LÖSUNGEN FÜR INDUSTRIELLE ANWENDUNGEN  
AKTUATOREN • MOTOREN • ELEKTRONIK • TEILE FÜR UAVS • DIENSTLEISTUNGEN

*INNOVATIVE COMMERCIAL SOLUTIONS*

*ACTUATORS • MOTORS • ELECTRONIC • PARTS FOR UAVS • SERVICES*





## INNOVATIVE LÖSUNGEN FÜR INDUSTRIELLE ANWENDUNGEN *INNOVATIVE COMMERCIAL SOLUTIONS*

- HITEC-ACTUATOREN NACH IHREN SPEZIFIKATIONEN
- ENTWICKLUNG UND PRODUKTION VON ELAPOR®-PARTIKELSCHAUMTEILEN UND ZUBEHÖRTEILEN FÜR UAVS
- BRUSHLESS-MOTOREN NACH IHREN ANFORDERUNGEN
- *HITEC ACTUATORS TO YOUR SPECIFICATIONS*
- *DEVELOPMENT AND PRODUCTION OF ELAPOR® PARTICLE FOAM COMPONENTS AND ACCESSORIES FOR UAVS*
- *BRUSHLESS MOTORS TO MEET YOUR REQUIREMENTS*

KONTAKTIEREN SIE UNS FÜR IHRE AUFGABEN.  
WIR FREUEN UNS AUF IHRE ANFRAGE!

*CONTACT US FOR YOUR PROJECTS.  
WE LOOK FORWARD TO RECEIVING  
YOUR QUERY!*



HITEC COMMERCIAL SOLUTIONS  
ACTUATOR ENGINEERING REIMAGINED

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MOTOREN  
MOTORS

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PARTIKELSCHAUM  
PARTICLE FOAM

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INDUSTRIELLE ANWENDUNGEN  
TYPICAL APPLICATIONS

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**HITEC MULTIPLEX JAPAN**  
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 EDOGAWA, TOKYO  
 JAPAN



**HITEC RCD PHILIPPINES**  
 LOT 6 & 8, BLOCK 24  
 PHASE 4 PEZA, ROSARIO, CAVITE  
 PHILIPPINES



**HITEC MULTIPLEX CHINA**  
 3F OF HONG LI BLDG #1, 24W  
 JINFENG RD, JINDING INDUSTRIAL  
 PARK, TANGIA, ZHUHAI  
 CHINA



# hitec



HITEC COMMERCIAL SOLUTIONS  
ACTUATOR ENGINEERING REIMAGINED

Seit 2002 gehört MULTIPLEX zur südkoreanischen HiTEC-Gruppe. HiTEC ist einer der größten Servohersteller weltweit. Über 50 Servotypen von höchster Qualität sind im Angebot (analog oder digital). Sie unterscheiden sich zum Beispiel in Bauform, Drehmoment, Stellzeit oder im Material des Getriebes.

Detaillierte Spezifikationen und Zeichnungen senden wir Ihnen gerne auf Anfrage.

Kontaktieren Sie uns unter:

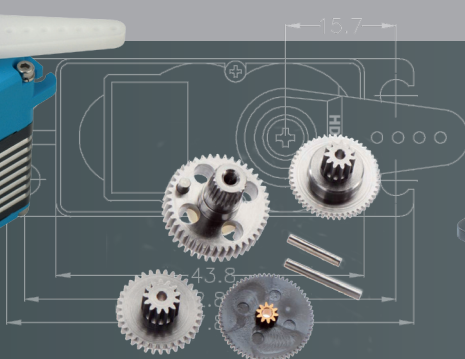
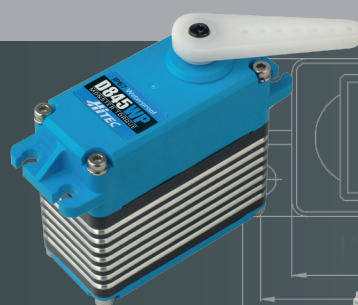
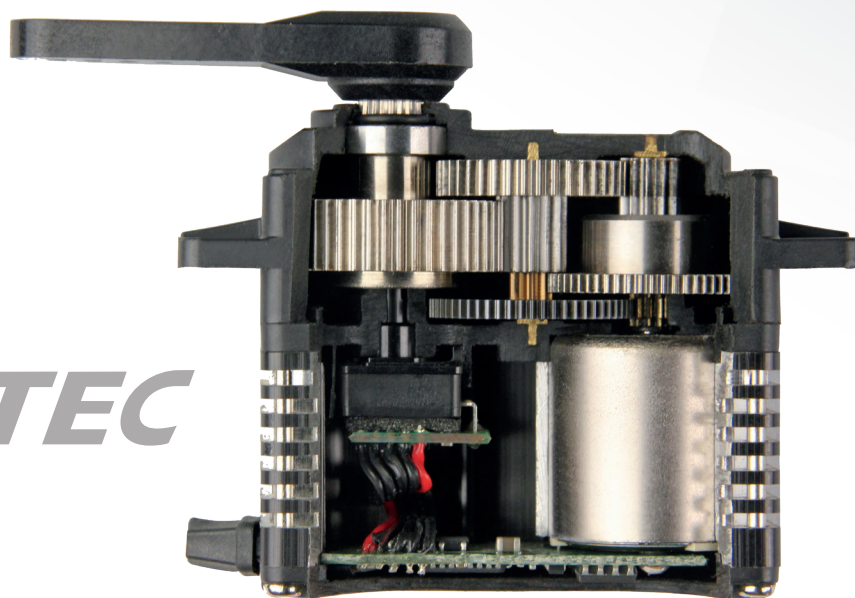
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*MULTIPLEX has belonged to the South Korean HiTEC group since 2002. HiTEC is one of the world's largest servo manufacturers. Its range encompasses more than 50 servo types (analogue or digital) of the highest quality, differing in such aspects as physical format, torque, transit speed and gear material.*

*We will be pleased to send you detailed specifications and drawings upon request.*

*Contact us at:*

*+49 (0) 7252 58093-0 • [info@multiplex-cs.de](mailto:info@multiplex-cs.de)*



## Führend in der Servotechnologie

Analogservos/Digitalservos/Linear Aktuatoren

MULTIPLEX produzierte ab 1992, als erster Hersteller weltweit, Digitalservos. Im Vergleich zu Analogservos haben Digitalservos ein höheres Drehmoment, eine viel feinere Auflösung, eine absolut genaue Neutralstellung und eine höhere Haltekraft. Der Motor eines Digitalservo wird durch die Steuerelektronik alle 3ms angesteuert.

Neben höchsten Ansprüchen im Modellsport erfüllen HiTEC-Servos auch die geforderten Standards der Industrie für die verschiedensten Anwendungen. Mit einer Stellkraft von bis zu 110 kg, Wasserdichtigkeit nach IP 67 oder der Möglichkeit einer 360° Drehbewegung sind HiTEC-Servos jeder Anforderung gewachsen. Die neueste 32-bit MCU/12 Bit ADC -Technologie ermöglicht eine doppelt so hohe Auflösung der Servowege als bisher, wodurch noch feiner und präziser geregelt werden kann.

Die Ansteuerung erfolgt über: PWM-, RS485-Schnittstelle oder CAN-Bus.

Je nach Anwendungsfall kann man zwischen Bürsten-, Glockenanker oder Brushlessmotor wählen. Getriebe können aus Karbonit, Stahl oder gar Titan ausgewählt werden. Dabei kommen auch Hybridsysteme zum Einsatz, welche die Vorteile der verschiedenen Materialien kombinieren.

Einige Typen bieten die Möglichkeit der kontaktlosen und damit verschleißfreien Positionsaufnahme mittels eines Magnetic-Encoders an. Neben digitalen, programmierbaren Servos sind ebenfalls analoge erhältlich. Unsere Wide Voltage-Serie hat eine Betriebsspannung zwischen 4,8 und 8,4 Volt, wobei es auch Servos mit einer Betriebsspannung bis zu 14,8 Volt gibt.

Neben den inneren Werten überzeugen die HiTEC-Servos auch durch hochwertigen Alugehäusen. Wenn auf einem HiTEC-Servo Titan-Getriebe draufsteht, ist auch das komplette Getriebe aus Titan. Ab Herbst 2019 werden Linear-Aktuatoren das Angebot für industrielle Anwendungen deutlich erweitern.

**Die besonderen Pluspunkte von HiTEC-Servos sind**

- Programmierbar
- Hohe Auflösung
- Drehwinkel bis zu 1x 360° oder Multiturn
- Softstart
- Totzone – elektromagnetisches Spiel
- Overload Protection
- PWM, RS-485, CAN-BUS Automotive
- CAN BUS UAV  
- Kunststoff-oder Metallgehäuse
- Schutzklassen IP56, IP 65, IP 67, IP 68

## Showing the way in servo technology

*Analogue servos / Digital servos / Linear actuators*

*MULTIPLEX was the world's first manufacturer to produce digital servos back in 1992. Compared with analogue servos, digital servos offer higher torque, much finer resolution, totally precise neutral positioning and increased holding power. The motor in a digital servo receives a control signal from its electronic control circuit every 3ms.*

*In the field of model sport HiTEC servos satisfy the most exacting requirements, but they also meet the essential standards of industry for a vast range of applications. With an output power of up to 110 kg, waterproofing standards to IP 67 or the option of 360° rotary travel HiTEC, servos measure up to every requirement. The latest 32-bit MCU / 12-bit ADC technology provides twice the servo travel resolution previously attained, which in turn ensures finer, more accurate control.*

*Servos can be controlled by: PWM interface, RS485 interface or CAN-Bus.*

*Servos are available with brushed, coreless or brushless motors, combined with carbonite, steel or even titanium gears. Hybrid systems are also employed, combining the advantages of the various materials.*

*A number of types offer the option of zero-wear contactless positioning by means of magnetic encoders. Our range of digital programmable servos is complemented by analogue types, while the wide-voltage series can handle operating voltages in the range 4.8 to 8.4 Volt, although servos with an operating voltage of up to 14.8 Volt are also available.*

*The internal quality of HiTEC servos is enhanced by high-quality aluminium cases. If you see 'Titanium gears' printed on a HiTEC servo, then the entire gearbox is made of titanium. In Autumn 2019 a range of linear actuators is to be introduced, significantly expanding the product range for industrial applications.*

**The particular advantages of HiTEC servos are as follows:**

- Programmable
- High resolution
- Rotational travel up to 1 x 360° or Multi-turn
- Soft-start
- Deadzone – electromagnetic deadband
- Overload protection
- PWM, RS-485, CAN-BUS automotive
- CAN BUS UAV  
- Plastic or metal case
- Protection categories IP56, IP 65, IP 67, IP 68



## DIENSTLEISTUNGEN → AKTUATOREN SERVICES → ACTUATORS

Trotz der Vielzahl von „Serien-Servos/Actuatoren“ die in vielen industriellen Anwendungen ihren Einsatz finden und nahezu alle benötigten Anforderungen erfüllen, bietet MULTIPLEX/HiTEC die Möglichkeit, Servos/Actuatoren nach Ihren Spezifikationen zu produzieren.

- Servos/Actuatoren serienmäßig passend für eine Vielzahl an industriellen Anwendungen
- Anpassung der Servos/Actuatoren an Ihre Applikationen
- Programmieren der Servos/Actuatoren nach Ihren Spezifikationen

Kontaktieren Sie uns unter:  
+49 (0) 7252 58093-0 • [info@multiplex-cs.de](mailto:info@multiplex-cs.de)

*Although we can supply a large number of “standard servos / actuators” which are employed in many industrial applications and fulfil virtually all requirements, MULTIPLEX / HiTEC also offers the option of producing servos / actuators to your own specifications.*

- *Standard servos / actuators suitable for a wide range of industrial applications*
- *Customisation of servos / actuators to suit your applications*
- *Programming of servos / actuators to your own specifications*

Contact us at:  
+49 (0) 7252 58093-0 • [info@multiplex-cs.de](mailto:info@multiplex-cs.de)



*NEW 2019*



**SG33BL**



## Pictogramme

|              |                                                |
|--------------|------------------------------------------------|
| <b>HV</b>    | HochVolt 4,8 - 8,4 V                           |
| <b>HR</b>    | Elektronik für extreme Ansprechgeschwindigkeit |
| <b>TG</b>    | Titan-Getriebe                                 |
| <b>SG</b>    | Stahl-Getriebe                                 |
| <b>MG</b>    | Metall-Getriebe                                |
| <b>NG</b>    | Nylon-Getriebe                                 |
| <b>KG</b>    | Karbonite-Getriebe                             |
| <b>H25T</b>  | 25er-Verzahnung-Abtriebshebel                  |
| <b>12B</b>   | 12-Bit Resolution Digital Circuit              |
| <b>NRG</b>   | Stromsparer                                    |
| <b>PRG</b>   | Programmierbar                                 |
| <b>BL</b>    | Brushless-Motor                                |
| <b>G2</b>    | Zweite Generation                              |
| <b>WP</b>    | Wasserdicht                                    |
| <b>32 BT</b> | 32-Bit Resolution Digital Circuit              |



100%  
Wasserdicht



Magnetischer  
Encoder



Wide Voltage  
4,8 - 8,4 Volt



Stromsparer



25er  
Verzahnung

## HS-XXXXZZ

### Typenkenntung

3-stellig = Analog-Servos  
die 3. Stelle gibt grob die Servoklasse an  
0XX (Sub)-Micro-Servos < 13 mm Breite  
1XX Flächenservo  
2XX Kompakt-Servos 13 - 18 mm  
3XX 20 mm Baureihe preisgünstig  
4XX 20 mm Standard  
6XX 20 mm Premium  
7XX Quarter-Scale (29 mm)  
8XX Giant-Scale (30 mm)  
4-stellig = Digital-Servos  
5XXX sind Digital-Servos der 1. Generation  
7XXX sind Digital-Servos der 2. Generation  
mit erweiterten Programmiermöglichkeiten  
M vor 7XXX Magnet-Encoder-Servos ohne Poti

## HS-XXXXZZ

### Besondere Merkmale

|     |                                                |                      |                                                          |
|-----|------------------------------------------------|----------------------|----------------------------------------------------------|
| HS  | = HITEC-Servo                                  | SGT                  | = (Steel Gear Torque) Stahlgetriebe für hohes Drehmoment |
| HSI | = HITEC-Industrie-Servo                        | SHR                  | = (Steel HV Rudder) Seitenruderservo                     |
| D   | = HITEC programmierbare D-Serie                | CR                   | = kontinuierliche Drehung                                |
| DB  | = HITEC programmierbare D-Serie mit BLDC Motor | A                    | = (Advanced Gear) extrastarkes Getriebe                  |
| MD  | = D-Serie mit magnetischem Encoder             | H an der 2ten Stelle | = High Voltage bis 8,4 V                                 |
| MDR | = D-Serie Robotic mit magnetischem Encoder     | BH                   | = Kugellager, bis 8,4 V                                  |
| MW  | = Widevoltage mit Metall-Getriebe              | MH                   | = Metallgetriebe, bis 8,4 V                              |
| SW  | = Widevoltage mit Stahl-Getriebe               | SH                   | = Stahlgetriebe, bis 8,4 V                               |
| TW  | = Widevoltage mit Titan-Getriebe               | TH                   | = Titangetriebe, bis 8,4 V                               |
| BB  | = Kugellager                                   |                      |                                                          |
| HD  | = (Heavy Duty) KARBONITE®-Getriebe             |                      |                                                          |
| HB  | = KARBONITE®-Getriebe mit Kugellager           |                      |                                                          |
| MG  | = Metall-Getriebe (immer mit Kugellager)       |                      |                                                          |
| SG  | = Stahl-Getriebe (immer mit Kugellager)        |                      |                                                          |
| TG  | = Titan-Getriebe (immer mit Kugellager)        |                      |                                                          |
| WP  | = wasserdicht nach IP 67                       |                      |                                                          |
| HSB | = Brushless-Motor                              |                      |                                                          |
| HSR | = Robotik-Servo                                |                      |                                                          |
| HSG | = (Gier) Kreisel servo                         |                      |                                                          |

## Pictogramme

|              |                                        |
|--------------|----------------------------------------|
| <b>HV</b>    | High Volt 4,8 - 8,4 V                  |
| <b>HR</b>    | Electronics for extreme response speed |
| <b>TG</b>    | Titanium gearbox                       |
| <b>SG</b>    | Steel gearbox                          |
| <b>MG</b>    | Metal gearbox                          |
| <b>NG</b>    | Nylon gearbox                          |
| <b>KG</b>    | Karbonite gearbox                      |
| <b>H25T</b>  | 25-spline output shaft                 |
| <b>12B</b>   | 12-bit resolution digital circuit      |
| <b>NRG</b>   | Current saving                         |
| <b>PRG</b>   | Programmable                           |
| <b>BL</b>    | Brushless motor                        |
| <b>G2</b>    | Second generation                      |
| <b>WP</b>    | Waterproof                             |
| <b>32 BT</b> | 32-bit resolution digital circuit      |



100%  
watertight



Magnetic  
encoder



Wide Voltage  
4,8 - 8,4 Volt



Current saving



25-spline  
output shaft

## HS-XXXXZZ

### Type identification

3-digit = analogue servos  
the 3rd digit is a coarse indication of the servo category  
0XX (sub)-micro servos < 13 mm width  
1XX wing-mounted servos  
2XX compact servos, 13 - 18 mm  
3XX 20 mm series, low-cost  
4XX 20 mm standard  
6XX 20 mm premium  
7XX quarter-scale (29 mm)  
8XX giant-scale (30 mm)  
4-digit = digital servos  
5XXX are first-generation digital servos  
7XXX are second-generation digital servos  
with expanded programming facilities  
M preceding 7XXX magnetic encoder servos  
without pot

## HS-XXXXZZ

### Special features

|     |                                               |                |                                                     |
|-----|-----------------------------------------------|----------------|-----------------------------------------------------|
| HS  | = HITEC servo                                 | SGT            | = (Steel Gear Torque) steel gearbox for high torque |
| HSI | = HITEC industrial servo                      | SHR            | = (Steel HV rudder) rudder servo                    |
| D   | = HITEC programmable D-series                 | CR             | = Continuous rotation                               |
| DB  | = HITEC programmable D-series with BLDC motor | A              | = (Advanced Gear) ultra-robust gearbox              |
| MD  | = D-series with magnetic encoder              | H as 2nd digit | = High Voltage up to 8.4 V                          |
| MDR | = D-series robotic with magnetic encoder      | BH             | = Ballrace, up to 8.4 V                             |
| MW  | = Wide-voltage with metal gearbox             | MH             | = Metal gearbox, up to 8.4 V                        |
| SW  | = Wide-voltage with steel gearbox             | SH             | = Steel gearbox, up to 8.4 V                        |
| TW  | = Wide-voltage with titanium gearbox          | TH             | = Titanium gearbox, up to 8.4 V                     |
| BB  | = Ballrace                                    |                |                                                     |
| HD  | = (Heavy Duty) Karbonite® gearbox             |                |                                                     |
| HB  | = Karbonite® gearbox with ballrace            |                |                                                     |
| MG  | = Metal gearbox (always with ballrace)        |                |                                                     |
| SG  | = Steel gearbox (always with ballrace)        |                |                                                     |
| TG  | = Titanium gearbox (always with ballrace)     |                |                                                     |
| WP  | = Waterproof to IP 67                         |                |                                                     |
| HSB | = Brushless motor                             |                |                                                     |
| HSR | = Robotic servo                               |                |                                                     |
| HSG | = (Yaw) gyro servo                            |                |                                                     |



Dieser Servoaktuator wurde konsequent für den industriellen Einsatz entwickelt.  
Mit der doppelt kugellagierten Abtriebswelle werden höchste Anforderungen in Sachen Präzision und Zuverlässigkeit erfüllt.  
Einzigartige und innovative Funktionen kommen zum Einsatz und liefern das bis dato unglaublichste Servo im Sortiment.

### Eigenschaften:

- Programmierbare Digitalschaltung mit MOS FET-Verstärker
- Hochleistungs-BLDC-Motor mit langer Lebensdauer

- Magnetischer Encoder Positionssensor
- Breiter Betriebsspannungsbereich
- Robust, Titan oder gehärtetes Stahlgetriebe
- Geringes Zahnradspiel (<0,5 °)
- Doppelt kugellagerte Abtriebswelle
- Nadellager unterstützte Tragrollen in den Getriebestufen
- Robustes Gehäuse aus eloxierter Aluminiumlegierung
- IP68 Schutzklasse
- Proportionale Drehung um 360° möglich
- RS-485\*, PWM oder TTL-Steueroptionen verfügbar  
(\*Die verfügbare RS-485-Protokolloption MUSS gesondert bestellt werden)
- D-SUB9-Anschluss
- Getriebe-Schutzsystem
- Anpassungs- und Änderungsoptionen auf Wunsch möglich
- Benutzerdefinierte Stecker-Option auf Wunsch möglich

## NEW 2019 SG33BL

*This servo actuator has been developed specifically for industrial applications. The twin-ballraced output shaft satisfies the most stringent requirements in terms of precision and reliability. The unit incorporates unique and innovative functions, making it currently the most incredible servo in the range.*

### Characteristics:

- Programmable digital circuit with MOSFET amplifier
- Extremely durable high-performance BLDC motor
- Magnetic encoder positional sensor
- Broad operating voltage range
- Robust titanium or hardened steel gearbox
- Minimal gear play (<0.5 °)
- Twin-ballraced output shaft
- Load-bearing rollers in gearbox stages running in needle-roller bearings
- Robust case made of anodised aluminium alloy
- IP68 protection class
- Proportional rotation up to 360° possible
- RS-485\*, PWM or TTL control options available  
(\*the optional RS-485 protocol MUST be ordered separately)
- D-SUB9 connector
- Gearbox protection system
- Customising and amendment options possible upon request
- User-defined connector option possible upon request

| #         | Type    | Breite<br>Width<br>mm | Länge<br>Length<br>mm | Höhe<br>Height<br>mm | Gewicht<br>Weight<br>g | sec/60° * | kgcm * | Lager<br>Bearing<br>BB | Features                                                       |
|-----------|---------|-----------------------|-----------------------|----------------------|------------------------|-----------|--------|------------------------|----------------------------------------------------------------|
| # 1-00932 | SG33BLT | 33                    | 64                    | 95                   | 400                    | 0,15      | 146,84 | 4                      | <b>HV</b> <b>TG</b> <b>12B</b> <b>PRG</b> <b>NRG</b> <b>BL</b> |

Temperaturbereich -30°C - +70°C  
Temperature range -30°C - +70°C

# NEW 2019



## D956WP

Wasserdichtes (IP67), digitales, preisgünstiges Servo für den industriellen Einsatz

Waterproof (IP67), digital, low-cost servo for industrial applications

| #         | Typ<br>Type | Breite<br>Width<br>mm | Länge<br>Length<br>mm | Höhe<br>Height<br>mm | Gewicht<br>Weight<br>g | sec/60° *      | kgcm *         | Lager<br>Bearing<br>BB | Features                 |
|-----------|-------------|-----------------------|-----------------------|----------------------|------------------------|----------------|----------------|------------------------|--------------------------|
| # 1-00932 | D956WP      | 20                    | 40                    | 37                   | 72,4                   | 0,19/0,15/0,12 | 16,0/20,0/24,5 | 2                      | HV TG 12 H25T PRG NRG BL |

# NEW 2019



## MDR845WP

- Wasserdicht nach IP67 Norm
- Magnetischer Encoder (Positions-Sensor)
- 5-Pol Carbon Brush Motor
- Robuste Zahnräder aus gehärtetem Stahl
- Anpassbar an Ihre Anforderungen

- IP67 Waterproof Rating
- Magnetic Encoder Position Sensor
- 5-Pole Cored Carbon Brush Motor
- Robust Hardened Steel Gears
- Customization and Modification

| #         | Typ<br>Type | Breite<br>Width<br>mm | Länge<br>Length<br>mm | Höhe<br>Height<br>mm | Gewicht<br>Weight<br>g | sec/60° *      | kgcm *         | Lager<br>Bearing<br>BB | Features                 |
|-----------|-------------|-----------------------|-----------------------|----------------------|------------------------|----------------|----------------|------------------------|--------------------------|
| # 1-01329 | MDR845WP    | 32                    | 66                    | 62                   | 227                    | 0,26/0,21/0,17 | 32,5/40,5/50,0 | 2                      | HV TG 12 H25T PRG NRG BL |

- HiTEC-Qualität in Linear-Aktuatoren
- Extreme Stellgenauigkeit
- In verschiedenen Hublängen verfügbar

- Hitec Quality in a Linear Actuator
- Accurate Repeatability
- Available in Various Stroke Lengths

## HLS12-30/50/100



# NEW 2019

| #       | Typ<br>Type | Breite<br>Width<br>mm | Länge<br>Length<br>mm | Höhe<br>Height<br>mm | Gewicht<br>Weight<br>g | Hub<br>Stroke<br>mm | Spannung<br>Voltage<br>V | Geschwin.<br>Speed<br>0 Kg * | Geschwin.<br>Speed<br>1,7 Kg * | Geschwin.<br>Speed<br>3,1 Kg * | Geschwin.<br>Speed<br>4,2 Kg * |
|---------|-------------|-----------------------|-----------------------|----------------------|------------------------|---------------------|--------------------------|------------------------------|--------------------------------|--------------------------------|--------------------------------|
| 1-01602 | HLS12-30    | 15                    | 82                    | 18                   | 34                     | 30                  | 4,8V~7,4V                | 13 mm/s                      | 11 mm/s                        | 7 mm/s                         | 5 mm/s                         |
| 1-01603 | HLS12-50    | 15                    | 102                   | 18                   | 40                     | 50                  | 4,8V~7,4V                | 13 mm/s                      | 11 mm/s                        | 7 mm/s                         | 5 mm/s                         |
| 1-01604 | HLS12-100   | 15                    | 152                   | 18                   | 56                     | 100                 | 4,8V~7,4V                | 13 mm/s                      | 11 mm/s                        | 7 mm/s                         | 5 mm/s                         |

| #       | Typ<br>Type | Kraft max.<br>Max Static Force<br>N | Strom<br>Current<br>1,7 Kg * | Strom<br>Current<br>3,1 Kg * | Strom<br>Current<br>4,2 Kg * |
|---------|-------------|-------------------------------------|------------------------------|------------------------------|------------------------------|
| 1-01602 | HLS12-30    | 200                                 | 210mA                        | 300mA                        | 400mA                        |
| 1-01603 | HLS12-50    | 200                                 | 210mA                        | 300mA                        | 400mA                        |
| 1-01604 | HLS12-100   | 200                                 | 210mA                        | 300mA                        | 400mA                        |

Temperaturbereich -30°C - +80°C  
Temperature range -30°C - +80°C

\* @ 6 Volt

## ANALOG < 12 mm



HS-40



HS-45HB



HS-53



HS-55



HS-65HB



HS-65MG



HS-70MG

| #         | Typ<br>Type   | Breite<br>Width<br>mm | Länge<br>Length<br>mm | Höhe<br>Height<br>mm | Gewicht<br>Weight<br>g | sec/60° *   | kgcm *    | Lager<br>Bearing<br>BB | Features |
|-----------|---------------|-----------------------|-----------------------|----------------------|------------------------|-------------|-----------|------------------------|----------|
| # 112 040 | Servo HS-40   | 8,6                   | 20,0                  | 17,0                 | 4,8                    | 0,12 / 0,10 | 0,6 / 0,8 |                        | NG       |
| # 112 045 | Servo HS-45HB | 9,8                   | 24,0                  | 22,5                 | 8,0                    | 0,14 / -    | 1,0 / -   | 1                      | KG       |
| # 112 053 | Servo HS-53   | 11,6                  | 22,8                  | 22,6                 | 8,0                    | 0,14 / 0,11 | 1,5 / 1,9 |                        | NG       |
| # 112 055 | Servo HS-55   | 11,6                  | 22,8                  | 24,0                 | 8,0                    | 0,18 / 0,14 | 1,2 / 1,5 |                        | NG       |
| # 112 065 | Servo HS-65HB | 11,6                  | 23,6                  | 24,0                 | 11,2                   | 0,14 / 0,11 | 1,8 / 2,2 | 1                      | KG       |
| # 112 066 | Servo HS-65MG | 11,6                  | 23,6                  | 24,0                 | 11,9                   | 0,14 / 0,11 | 1,8 / 2,2 | 1                      | MG       |
| # 112 070 | Servo HS-70MG | 11,6                  | 23,6                  | 28,9                 | 12,5                   | 0,17 / 0,14 | 2,3 / 3,0 | 1                      | MG       |

## ANALOG 12-17 mm



HS-81



HS-82MG



HS-225BB



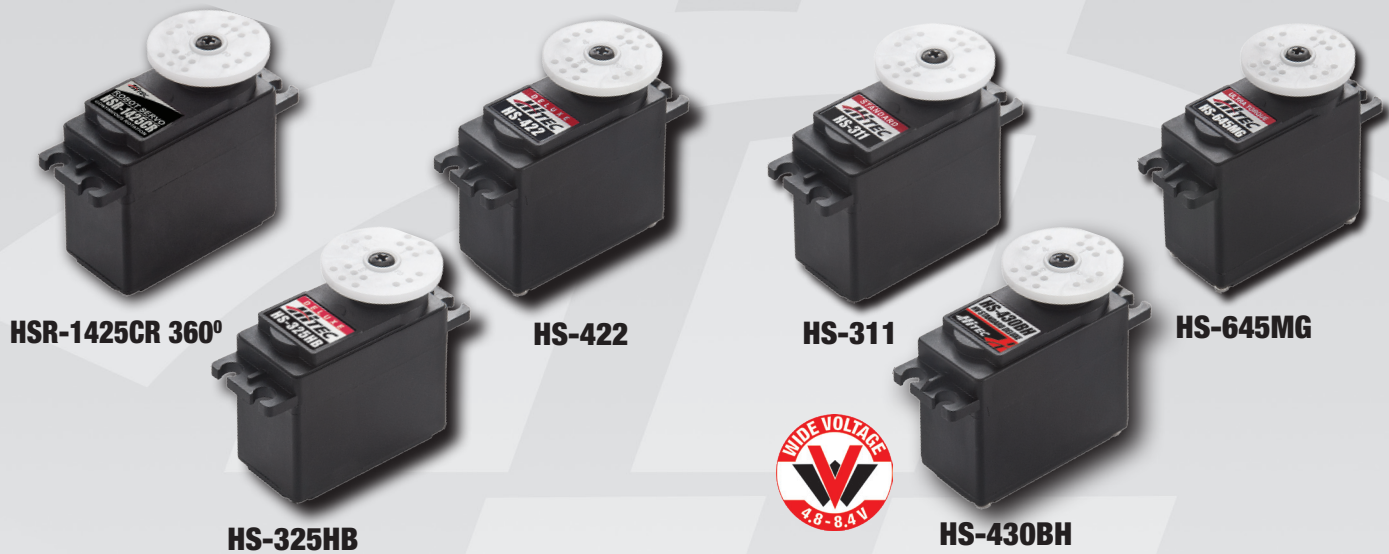
HS-225MG

| #         | Typ<br>Type    | Breite<br>Width<br>mm | Länge | Höhe<br>Height<br>mm | Gewicht<br>Weight<br>g | sec/60° *   | kgcm *    | Lager<br>Bearing<br>BB | Features |
|-----------|----------------|-----------------------|-------|----------------------|------------------------|-------------|-----------|------------------------|----------|
| # 112 081 | Servo HS-81    | 12,0                  | 30,0  | 30,0                 | 16,6                   | 0,11 / 0,09 | 2,6 / 3,1 |                        | NG       |
| # 112 088 | Servo HS-82MG  | 12,0                  | 30,0  | 30,0                 | 19,0                   | 0,12 / 0,10 | 2,9 / 3,5 |                        | MG       |
| # 112 225 | Servo HS-225BB | 16,8                  | 32,5  | 31,0                 | 27,0                   | 0,14 / 0,11 | 4,0 / 4,9 |                        | NG       |
| # 112 226 | Servo HS-225MG | 16,8                  | 32,5  | 31,0                 | 31,0                   | 0,14 / 0,11 | 4,0 / 4,9 | 1                      | MG       |

\*@ 11,1 V / 14,8 V



## ANALOG 20 mm



| #         | Typ<br>Type     | Breite<br>Width<br>mm | Länge<br>Length<br>mm | Höhe<br>Height<br>mm | Gewicht<br>Weight<br>g | sec/60° *   | kgcm *    | Lager<br>Bearing<br>BB | Features |
|-----------|-----------------|-----------------------|-----------------------|----------------------|------------------------|-------------|-----------|------------------------|----------|
| # 138 114 | HSR-1425CR 360° | 20,0                  | 40,6                  | 36,6                 | 41,7                   | 43 / 52 RPM | 2,8 / 3,4 |                        | NG       |
| # 112 422 | HS-422          | 20,0                  | 41,0                  | 37,0                 | 45,5                   | 0,21 / 0,16 | 3,4 / 4,2 | 1                      | NG       |
| # 112 645 | HS-645MG        | 20,0                  | 41,0                  | 38,0                 | 55,2                   | 0,24 / 0,20 | 7,9 / 9,8 | 2                      | MG       |
| # 112 311 | HS-311          | 20,0                  | 40,0                  | 36,5                 | 48,5                   | 0,19 / 0,15 | 3,1 / 3,6 |                        | NG       |
| # 112 325 | HS-325HB        | 20,0                  | 40,0                  | 36,5                 | 43,0                   | 0,19 / 0,15 | 3,1 / 3,8 | 1                      | KG       |
| # 114 430 | HS-430BH        | 20,0                  | 41,0                  | 37,0                 | 45,5                   | 0,16 / 0,14 | 4,2 / 5,1 | 2                      | HV NG    |

## ANALOG > 21 mm



| #         | Typ<br>Type | Breite<br>Width<br>mm | Länge<br>Length<br>mm | Höhe<br>Height<br>mm | Gewicht<br>Weight<br>g | sec/60° *   | kgcm *      | Lager<br>Bearing<br>BB | Features |
|-----------|-------------|-----------------------|-----------------------|----------------------|------------------------|-------------|-------------|------------------------|----------|
| # 112 075 | HS-75BB     | 23,0                  | 44,0                  | 25,0                 | 35,0                   | 0,45 / 0,34 | 6,7 / 8,4   | 1                      | NG       |
| # 112 755 | HS-755HB    | 29,0                  | 59,0                  | 50,0                 | 110,0                  | 0,28 / 0,23 | 11,2 / 13,5 | 2                      | KG       |
| # 112 756 | HS-755MG    | 29,0                  | 59,0                  | 50,0                 | 117,0                  | 0,28 / 0,23 | 1,2 / 1,5   | 2                      | MG       |
| # 112 765 | HS-765HB    | 29,0                  | 59,0                  | 50,0                 | 110,0                  | 0,28 / 0,23 | 11,2 / 13,5 | 2                      | KG       |
| # 112 785 | HS-785HB    | 29,0                  | 59,0                  | 52,0                 | 110,0                  | 1,68 / 1,38 | 11,2 / 13,5 | 2                      | KG       |
| # 115 646 | HS-646WP    | 21,0                  | 41,0                  | 40,0                 | 58,0                   | 0,26 / 0,22 | 7,1 / 8,6   | 2                      | MG WP HV |

\*@ 11,1V / 14,8V

## DIGITAL < 12 mm



HS-5055MG



HS-5065MG

| #         | Typ<br>Type     | Breite<br>Width<br>mm | Länge<br>Length<br>mm | Höhe<br>Height<br>mm | Gewicht<br>Weight<br>g | sec/60° *   | kgcm *    | Lager<br>Bearing<br>BB | Features |
|-----------|-----------------|-----------------------|-----------------------|----------------------|------------------------|-------------|-----------|------------------------|----------|
| # 113 055 | Servo HS-5055MG | 11,6                  | 22,8                  | 24,0                 | 9,5                    | 0,17 / 0,14 | 1,2 / 1,5 |                        | MG PRG   |
| # 113 065 | Servo HS-5065MG | 11,6                  | 23,6                  | 24,0                 | 11,9                   | 0,14 / 0,11 | 1,8 / 2,2 | 1                      | MG PRG   |

## DIGITAL 12-19 mm



HS-5070MH



HS-5087MH



HS-5245MG



HS-5086WP



HS-5625MG



HS-5485HB

| #         | Typ<br>Type | Breite<br>Width<br>mm | Länge<br>Length<br>mm | Höhe<br>Height<br>mm | Gewicht<br>Weight<br>g | sec/60° *   | kgcm *      | Lager<br>Bearing<br>BB | Features  |
|-----------|-------------|-----------------------|-----------------------|----------------------|------------------------|-------------|-------------|------------------------|-----------|
| # 113 070 | HS-5070MH   | 11,6                  | 23,6                  | 28,9                 | 12,5                   | 0,15 / 0,12 | 3,1 / 3,8   | 1                      | HV MG PRG |
| # 114 087 | HS-5087MH   | 13,0                  | 29,0                  | 30,0                 | 22,0                   | 0,17 / 0,13 | 3,7 / 4,4   | 1                      | HV MG PRG |
| # 115 086 | HS-5086WP   | 15,2                  | 31,0                  | 31,0                 | 22,0                   | 0,18 / 0,15 | 3,1 / 3,7   | 1                      | MG WP PRG |
| # 113 245 | HS-5245MG   | 16,8                  | 32,4                  | 30,8                 | 32,0                   | 0,15 / 0,12 | 4,5 / 5,6   | 2                      | MG PRG    |
| # 113 485 | HS-5485HB   | 19,8                  | 39,8                  | 38,0                 | 45,0                   | 0,20 / 0,17 | 5,3 / 6,5   | 3                      | KG PRG    |
| # 113 645 | HS-5645MG   | 19,8                  | 40,6                  | 37,8                 | 60,0                   | 0,23 / 0,18 | 10,5 / 12,3 | 2                      | MG PRG    |

\*@ 11,1 V / 14,8 V

# DIGITAL 20 mm



HS-5565MH



HS-5585MH



HS-7954SH



HSR-2645CR 360°

| #         | Typ<br>Type     | Breite<br>Width<br>mm | Länge<br>Length<br>mm | Höhe<br>Height<br>mm | Gewicht<br>Weight<br>g | sec/60° *                    | kgcm *                  | Lager<br>Bearing<br>BB | Features     |
|-----------|-----------------|-----------------------|-----------------------|----------------------|------------------------|------------------------------|-------------------------|------------------------|--------------|
| # 114 565 | HS-5565MH       | 20,0                  | 39,8                  | 38,0                 | 59,0                   | 0,11 / 0,09                  | 11,0 / 14,0             | 2                      | HV MG PRG    |
| # 114 585 | HS-5585MH       | 20,0                  | 39,8                  | 38,0                 | 59,0                   | 0,17 / 0,14                  | 14,0 / 17,0             | 2                      | HV MG PRG    |
| # 114 954 | HS-7954SH       | 20,0                  | 40,0                  | 37,0                 | 68,0                   | 0,15 / 0,12                  | 24,5 / 29,6             | 2                      | HV SG G2 PRG |
| # 138 645 | HSR-2645CR 360° | 20,0                  | 41,0                  | 38,0                 | 53,0                   | 6,0V = 58RPM<br>7,4V = 72RPM | 6V / 9,6<br>7,4V / 11,6 | 2                      | MG           |

## DIGITAL 20 mm · mit Brushlessmotor

### Brushless Power 2.0

Stromspartechnologie, bis zu 90% weniger Energiebedarf!  
Current-saving technology; consumes up to 90% less energy!



HSB-9360TH



HSB-9370TH



HSB-9380TH



HSB-9381TH



HSR-9382TH 360°



HSB-9465SH



HSB-9475SH



HSB-9485SH

| #         | Typ<br>Type     | Breite<br>Width<br>mm | Länge<br>Length<br>mm | Höhe<br>Height<br>mm | Gewicht<br>Weight<br>g | sec/60° *   | kgcm *      | Lager<br>Bearing<br>BB | Features                               |
|-----------|-----------------|-----------------------|-----------------------|----------------------|------------------------|-------------|-------------|------------------------|----------------------------------------|
| # 116 360 | HSB-9360TH      | 20,0                  | 40,0                  | 38,0                 | 68,0                   | 0,08 / 0,06 | 17,0 / 17,0 | 2                      | HV TG 12 <sup>15</sup> H25T PRG NRG BL |
| # 116 370 | HSB-9370TH      | 20,0                  | 40,0                  | 38,0                 | 68,0                   | 0,12 / 0,10 | 25,0 / 25,0 | 2                      | HV TG 12 <sup>15</sup> H25T PRG NRG BL |
| # 116 380 | HSB-9380TH      | 20,0                  | 40,0                  | 38,0                 | 68,0                   | 0,18 / 0,14 | 34,0 / 34,0 | 2                      | HV TG 12 <sup>15</sup> H25T PRG NRG BL |
| # 1-00074 | HSB-9381TH      | 20,0                  | 40,0                  | 38,0                 | 79,0                   | 0,17 / 0,14 | 34,0 / 34,0 | 2                      | HV TG 12 <sup>15</sup> H25T PRG NRG BL |
| # 1-01251 | HSR-9382TH 360° | 20,0                  | 40,0                  | 38,0                 | 68,0                   | 0,17 / 0,14 | 34,0 / 34,0 | 2                      | HV TG 12 <sup>15</sup> H25T PRG NRG BL |
| # 116 465 | HSB-9465SH      | 20,0                  | 40,0                  | 37,0                 | 62,0                   | 0,09 / 0,07 | 13,5 / 13,5 | 2                      | HV SG 12 <sup>15</sup> H25T PRG NRG BL |
| # 116 475 | HSB-9475SH      | 20,0                  | 40,0                  | 37,0                 | 62,0                   | 0,13 / 0,10 | 19,4 / 19,4 | 2                      | HV SG 12 <sup>15</sup> H25T PRG NRG BL |
| # 116 485 | HSB-9485SH      | 20,0                  | 40,0                  | 37,0                 | 62,0                   | 0,18 / 0,15 | 26,0 / 26,0 | 2                      | HV SG 12 <sup>15</sup> H25T PRG NRG BL |



## DIGITAL >20 mm



Wasserdicht  
nach IP67-Norm



HS-5646WP



HS-M7990TH



RHINO pro SHV digi 4

| #         | Typ<br>Type          | Breite<br>Width<br>mm | Länge<br>Length<br>mm | Höhe<br>Height<br>mm | Gewicht<br>Weight<br>g | sec/60° *   | kgcm *      | Lager<br>Bearing<br>BB | Features     |
|-----------|----------------------|-----------------------|-----------------------|----------------------|------------------------|-------------|-------------|------------------------|--------------|
| # 115 647 | HS-5646WP            | 21,0                  | 42,0                  | 40,0                 | 61,0                   | 0,20 / 0,18 | 11,5 / 13,2 | 2                      | MG WP HV PRG |
| # 114 990 | HS-M7990TH           | 22,4                  | 43,8                  | 40,0                 | 79,0                   | 0,21 / 0,17 | 36,7 / 44,9 | 1                      | HV TG PRG    |
| # 6 5154  | RHINO pro SHV digi 4 | 29,0                  | 59,0                  | 52,0                 | 172,0                  | 0,18 / 0,15 | 20 / 23     | 1                      | HV SG        |

## DIGITAL >20 mm

INDUSTRIAL SERVOS 11,1V - 14,8V

HS-1005SGT



HS-1100WP Ultra Giant



Wasserdicht  
nach IP67-Norm



| #         | Typ<br>Type | Breite<br>Width<br>mm | Länge<br>Length<br>mm | Höhe<br>Height<br>mm | Gewicht<br>Weight<br>g | sec/60° *   | kgcm *   | Lager<br>Bearing<br>BB | Features |
|-----------|-------------|-----------------------|-----------------------|----------------------|------------------------|-------------|----------|------------------------|----------|
| # 138 105 | HS-1005SGT  | 33,0                  | 64,0                  | 73,0                 | 363,0                  | 0,26 / 0,19 | 84 / 110 | 2                      | HV SG    |
| # 138 100 | HS-1100WP   | 33,0                  | 64,0                  | 73,0                 | 363,0                  | 0,26 / 0,19 | 84 / 110 | 2                      | HV SG WP |

\*@ 11,1V / 14,8V

# D-SERIE

Die stellingenauesten Servos der Welt! | *The world's most accurate servos!*

Die HiTEC **D-Serie** bietet die derzeit höchste am Markt erhältliche Auflösung der Servowege.  
*The HiTEC D-Series deliver the highest resolution known on the market.*



## 32bit MCU/12bit ADC

Realisieren Sie maximale Leistung mit unseren D-Serien-Servos! Ausgestattet mit der neuen 32-BIT MCU und der neuen 12-Bit-Technologie von HiTEC, verfügen diese Servos über die derzeit höchste Auflösung.

*Realize maximum performance with our D series Servos! Powered by Hitec's new 32-bit MCU and 12-bit ADC technology, these servos provide the best programmable response ever seen.*

**Höchste Auflösung!**  
*Highest resolution!*



**DIGITAL D-SERIE <20 mm**



| #         | Typ<br>Type    | Breite<br>Width<br>mm | Länge | Höhe | Gewicht<br>Weight<br>g | sec/60° *      | kgcm *       | Lager<br>Bearing<br>BB | Features                                                           |
|-----------|----------------|-----------------------|-------|------|------------------------|----------------|--------------|------------------------|--------------------------------------------------------------------|
| # 1-00064 | <b>D145SW</b>  | 10,0                  | 30,0  | 37,0 | 24,0                   | 0,21/0,17/0,14 | 3,9/4,9/6,0  | 2                      | <b>HV</b> <b>SG</b> <b>PRG</b> <b>HR</b> <b>32 BIT</b>             |
| # 1-00068 | <b>D85MG</b>   | 13,0                  | 29,0  | 30,0 | 24,0                   | 0,17/0,13      | 3,6/4,3      | 2                      | <b>MG</b> <b>PRG</b> <b>HR</b> <b>32 BIT</b>                       |
| # 1-00077 | <b>D89MW</b>   | 13,0                  | 29,0  | 30,0 | 25,0                   | 0,17/0,13/0,11 | 4,8/6,0/7,4  | 2                      | <b>HV</b> <b>MG</b> <b>PRG</b> <b>HR</b> <b>32 BIT</b>             |
| # 1-00707 | <b>MD250MW</b> | 15,0                  | 35,0  | 33,0 | 31,0                   | 0,2/0,16/0,13  | 4,9/6,1/7,5  | 2                      | <b>HV</b> <b>MG</b> <b>H25T</b> <b>PRG</b> <b>HR</b> <b>32 BIT</b> |
| # 116 625 | <b>D625MW</b>  | 19,8                  | 40,6  | 37,8 | 60,0                   | 0,20/0,15/0,13 | 6,3/8,8/10,0 | 2                      | <b>HV</b> <b>MG</b> <b>H25T</b> <b>PRG</b> <b>HR</b> <b>32 BIT</b> |

\*@ 11,1 V / 14,8 V



# DIGITAL D-SERIE 20 mm



D485HW



D930SW



D940TW



FULL  
METAL  
CASE



D941TW



D945TW



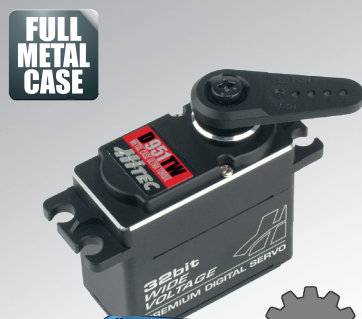
FULL  
METAL  
CASE



D946TW



D950TW



FULL  
METAL  
CASE



D951TW



FULL  
METAL  
CASE



D954SW



FULL  
METAL  
CASE



D955TW



| #         | Typ<br>Type | Breite<br>Width<br>mm | Länge<br>Length<br>mm | Höhe<br>Height<br>mm | Gewicht<br>Weight<br>g | sec/60° *      | kgcm *         | Lager<br>Bearing<br>BB | Features                 |
|-----------|-------------|-----------------------|-----------------------|----------------------|------------------------|----------------|----------------|------------------------|--------------------------|
| # 1-00066 | D485HW      | 20,0                  | 40,0                  | 38,0                 | 45,0                   | 0,20/0,17/0,15 | 5/6/7          | 2                      | KG HV PRG HR 32 BIT      |
| # 116 930 | D930SW      | 20,0                  | 40,0                  | 37,0                 | 66,0                   | 0,10/0,08/0,07 | 8/10/13        | 2                      | HV MG H25T PRG HR 32 BIT |
| # 116 940 | D940TW      | 20,0                  | 40,0                  | 38,0                 | 68,0                   | 0,11/0,08/0,07 | 10,0/13,5/16,5 | 2                      | HV TG H25T PRG HR 32 BIT |
| # 116 941 | D941TW      | 20,0                  | 40,0                  | 38,0                 | 80,0                   | 0,11/0,08/0,07 | 10,0/13,5/16,5 | 2                      | HV TG H25T PRG HR 32 BIT |
| # 116 945 | D945TW      | 20,0                  | 40,0                  | 38,0                 | 68,0                   | 0,16/0,12/0,10 | 14/18/23       | 2                      | HV TG H25T PRG HR 32 BIT |
| # 116 946 | D946TW      | 20,0                  | 40,0                  | 38,0                 | 80,0                   | 0,16/0,12/0,10 | 14/18/23       | 2                      | HV TG H25T PRG HR 32 BIT |
| # 116 950 | D950TW      | 20,0                  | 40,0                  | 38,0                 | 68,0                   | 0,23/0,17/0,14 | 21/29/35       | 2                      | HV TG H25T PRG HR 32 BIT |
| # 116 951 | D951TW      | 20,0                  | 40,0                  | 38,0                 | 80,0                   | 0,23/0,17/0,14 | 21/29/35       | 2                      | HV TG H25T PRG HR 32 BIT |
| # 116 954 | D954SW      | 20,0                  | 40,0                  | 37,0                 | 66,0                   | 0,19/0,15/0,12 | 18/24/29       | 2                      | HV MG H25T PRG HR 32 BIT |
| # 116 955 | D955TW      | 20,0                  | 40,0                  | 37,0                 | 66,0                   | 0,19/0,15/0,12 | 18/24/29       | 2                      | HV TG H25T PRG HR 32 BIT |

\*@ 11,1 V / 14,8 V



# DIGITAL D-SERIE >20 mm

**Low Profile!**



**D777MG**



**D980TW**

Voll-Titan-  
Getriebe



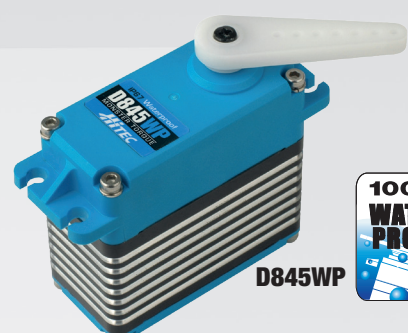
**D646WP**

**100%  
WATER  
PROOF**



**D840WP**

**100%  
WATER  
PROOF**



**D845WP**

**100%  
WATER  
PROOF**

| #         | Typ<br>Type   | Breite<br>Width<br>mm | Länge<br>Length<br>mm | Höhe<br>Height<br>mm | Gewicht<br>Weight<br>g | sec/60° *      | kgcm *         | Lager<br>Bearing<br>BB | Features                        |
|-----------|---------------|-----------------------|-----------------------|----------------------|------------------------|----------------|----------------|------------------------|---------------------------------|
| # 1-00072 | <b>D646WP</b> | 21,0                  | 42,0                  | 40,0                 | 61,0                   | 0,24/0,19/0,16 | 7,0/10,0/12,0  | 2                      | <b>HV SG WP PRG HR 32 BIT</b>   |
| # 1-00070 | <b>D777MG</b> | 21,0                  | 40,0                  | 25,0                 | 45,0                   | 0,09/0,07      | 5,2/6,5        | 2                      | <b>MG H25T PRG HR 32 BIT</b>    |
| # 116 980 | <b>D980TW</b> | 22,4                  | 43,8                  | 40,0                 | 78,2                   | 0,28/0,21/0,17 | 26/36/44       | 2                      | <b>HV TG H25T PRG HR 32 BIT</b> |
| # 116 840 | <b>D840WP</b> | 32,0                  | 66,0                  | 62,0                 | 227,0                  | 0,17/0,14/0,11 | 19,0/24,0/30,0 | 2                      | <b>HV SG WP PRG HR 32 BIT</b>   |
| # 116 845 | <b>D845WP</b> | 32,0                  | 66,0                  | 62,0                 | 227,0                  | 0,26/0,21/0,17 | 32,5/40,5/50,0 | 2                      | <b>HV SG WP PRG HR 32 BIT</b>   |

\*@ 11,1 V / 14,8 V



**9001:2015  
CERTIFIED  
COMPANY**



**14001:2015  
CERTIFIED  
COMPANY**



# ACTUATOR/SERVO-ZUBEHÖR ACTUATOR ACCESSORIES



**DPC-CAN # 1-01605**  
**DPC-RS485 # 1-01606**

## DPC-CAN / DPC-RS485

CAN / RS-485 Interface für HiTEC Industrie-Aktuatoren

- Liest und schreibt unterschiedlichste Parameter
- Das fortschrittlichste Programmiersystem von HiTEC

CAN / RS-485 Interface for Hitec Industrial Actuators

- Reads and Writes a Variety of Parameters
- Our Most Advanced Programming System

**DPC-11**  
**# 116 011**



## PC-Interface zum Servo-Programmieren DPC-11

- Anpassung verschiedener Parameter folgender HiTEC-Servos: DXXX, HSB-9XXX, HS-7XXX, HS-5XXX
- Ermöglicht das Ausprobieren verschiedener Einstellungen vor dem Einbau des Servos
- Speichern und Abrufen verschiedener Einstellungen mit DPC-11 Software
- Download der Software auf den PC
- *Customize the parameters of Hitec's programmable DXXX, HSB-9XXX, HS-7XXX and HS-5XXX series servos*
- *Test settings prior to servo installation*
- *Save and load servo parameter files and restore the factory default files with the DPC-11 software*
- *Download the DPC-11 software to your PC*

## Servoprogrammiergerät HFP-30

Das digitale Servoprogrammiergerät HFP-30 dient zum Testen und Programmieren von HiTEC Digital-Servos und überzeugt durch geringes Gewicht. Es bietet zahlreiche Funktionen auf dem großen und leicht zu lesenden LCD-Bildschirm. Geeignet für folgende HiTEC-Servos: HS-5XXX, 7XXX, Brushless-9XXX und die neue D-Serie. Betrieb im Spannungsbereich von 4,8 - 8,4V.

*Our lightweight HFP-30 Field Programmer is the latest in digital servo testing and programming. Packed with advanced features and a large, easy-to-read LCD screen, it efficiently programs all Hitec digital servos, including the HS-5XXX, HS-7XXX, brushless HSB-9XXX, and the latest D-Series. Operating on a wide voltage range of 4.8~8.4V.*

**HFP-30 # 116 001**

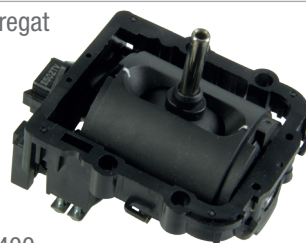


Knüppelaggregat



# IND-950119

Knüppelaggregat



# IND-4060400

Knüppelaggregat



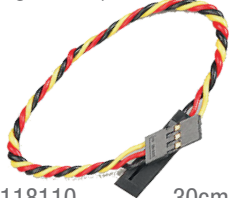
# IND-4041130

Verlängerungskabel  
Extension lead



# 85019 15 cm (UNI)  
# 85031 30 cm (UNI)  
# 85029 40 cm (UNI)  
# 85032 60 cm (UNI)

Servo-Verlängerungskabel  
(Stecker&Buchse) verdreht  
Servo extension lead  
(plug&socket) twisted wiring



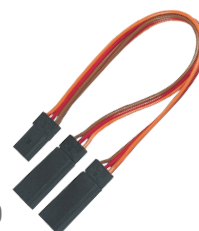
# 118110 30cm  
# 118111 60cm.

Servo-Anschlusskabel 10cm  
(MICRO)  
Servo lead 10cm (MICRO)



# 85140

V-Kabel (UNI)  
V-cable (UNI)



# 85030

Servo-Anschlußkabel (UNI)  
Servo-connector (UNI)



# 85133

Kupplungskabel (UNI)  
Coupling lead (UNI)



# 85034

Servo-Kupplungskabel Buchse 30cm  
Servo coupling lead socket 30cm

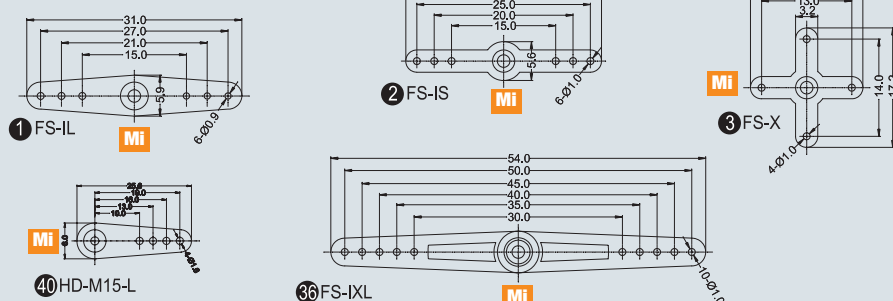


# 118343

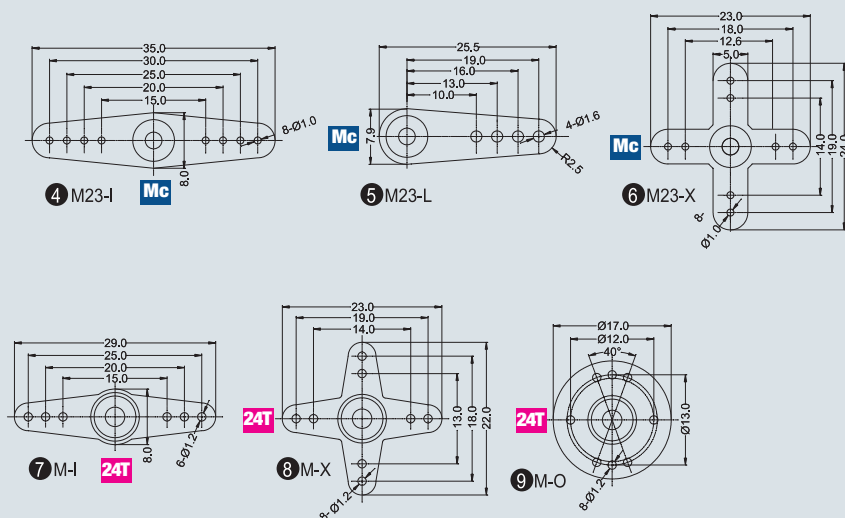
## Abtriebsgrößen

|          |            |
|----------|------------|
| Micro    | <b>Mc</b>  |
| Mini     | <b>Mi</b>  |
| Standard | <b>24T</b> |
| Mega     | <b>Mg</b>  |
| Robotik  | <b>Ro</b>  |
| 25 Zähne | <b>25T</b> |

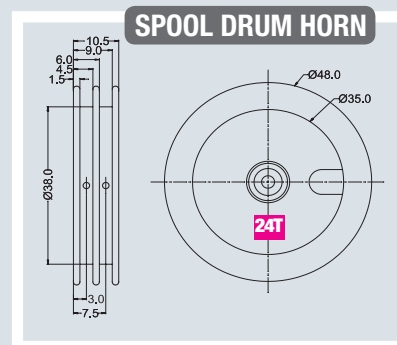
## FEATHER HORN



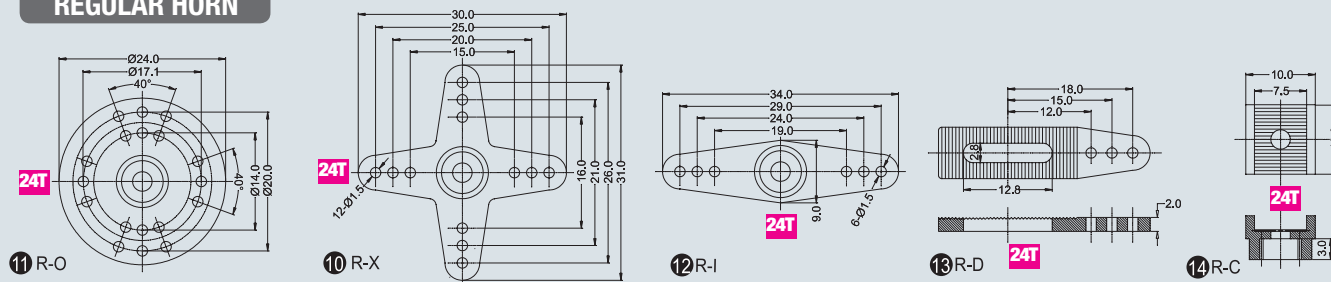
## MICRO HORN



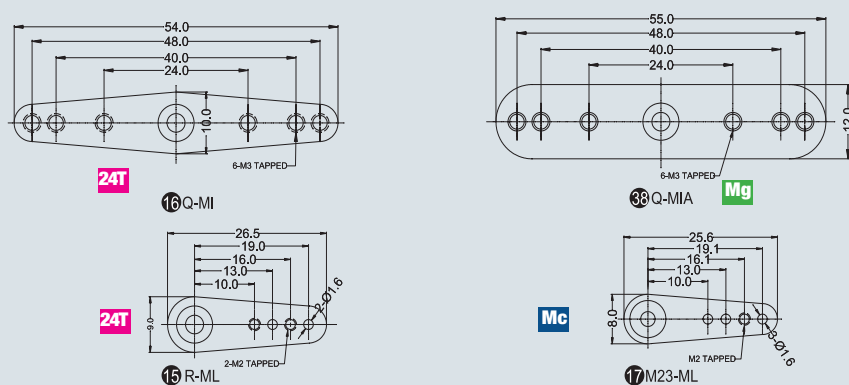
## SPOOL DRUM HORN



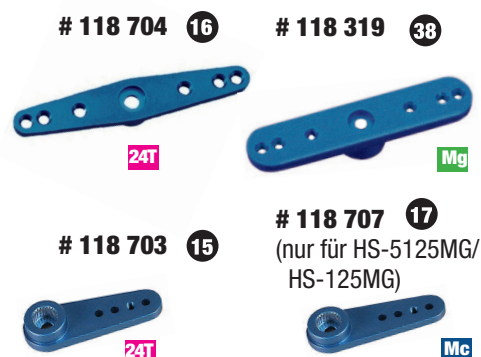
## REGULAR HORN



## METAL HORN ALUMINIUM

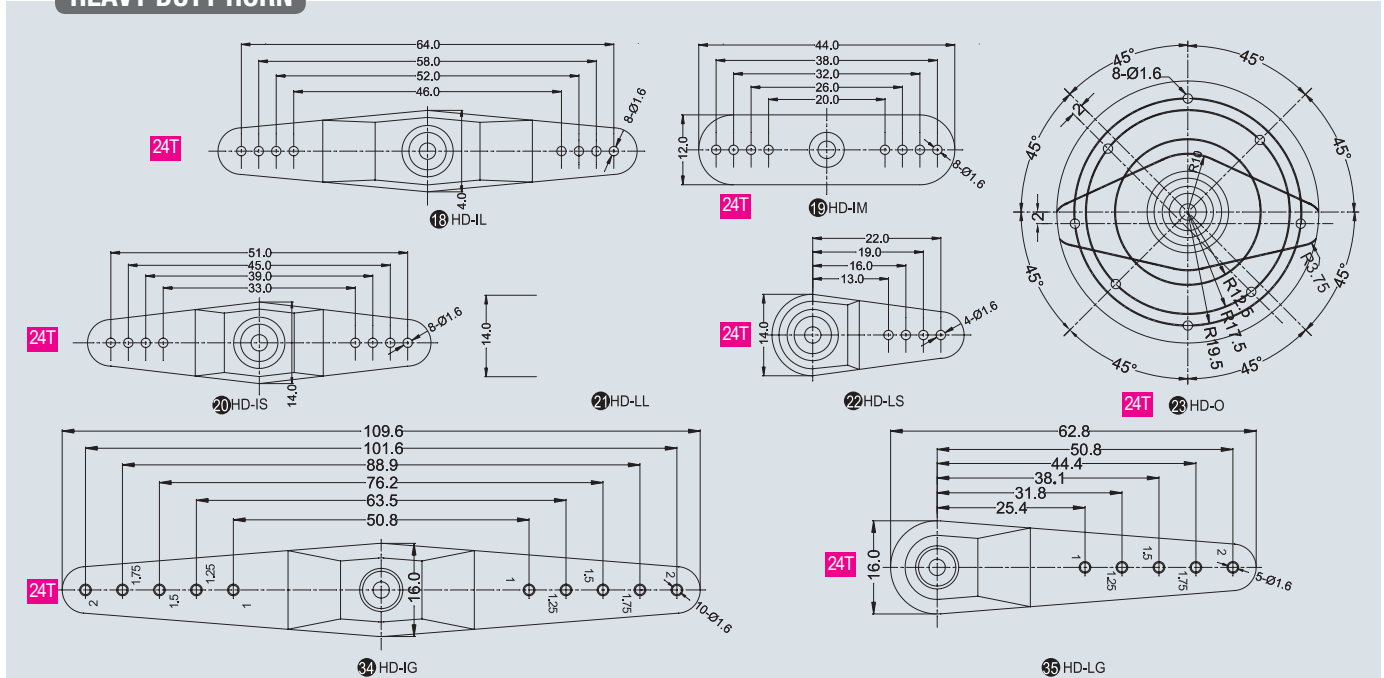


## METAL HORN ALUMINIUM

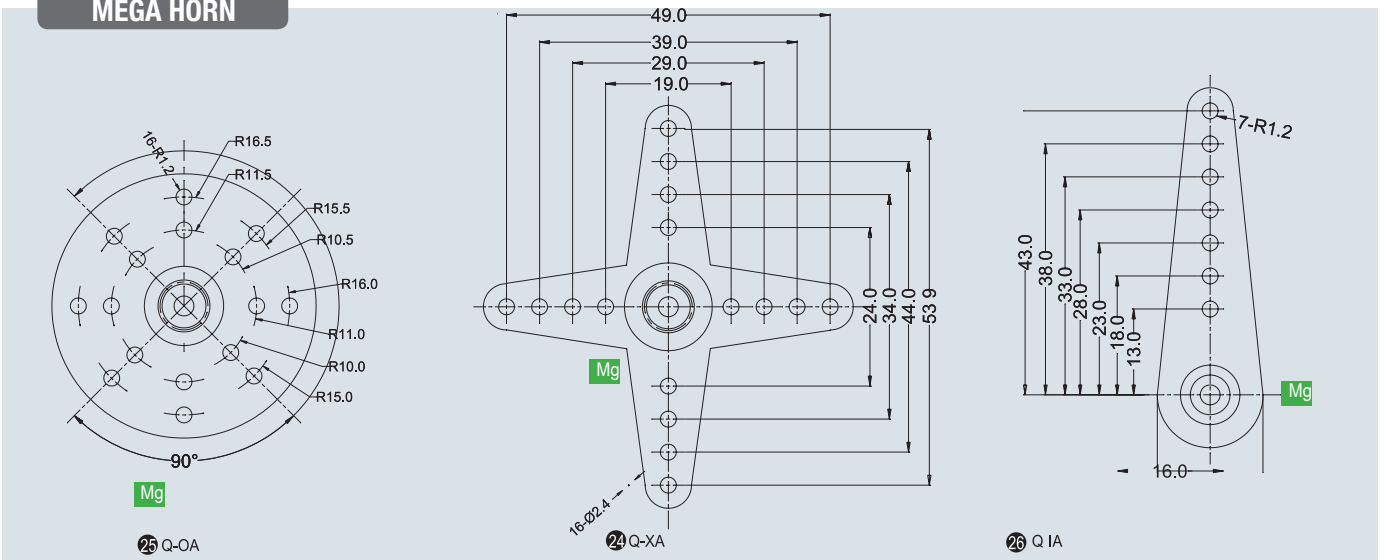




## HEAVY DUTY HORN



## MEGA HORN



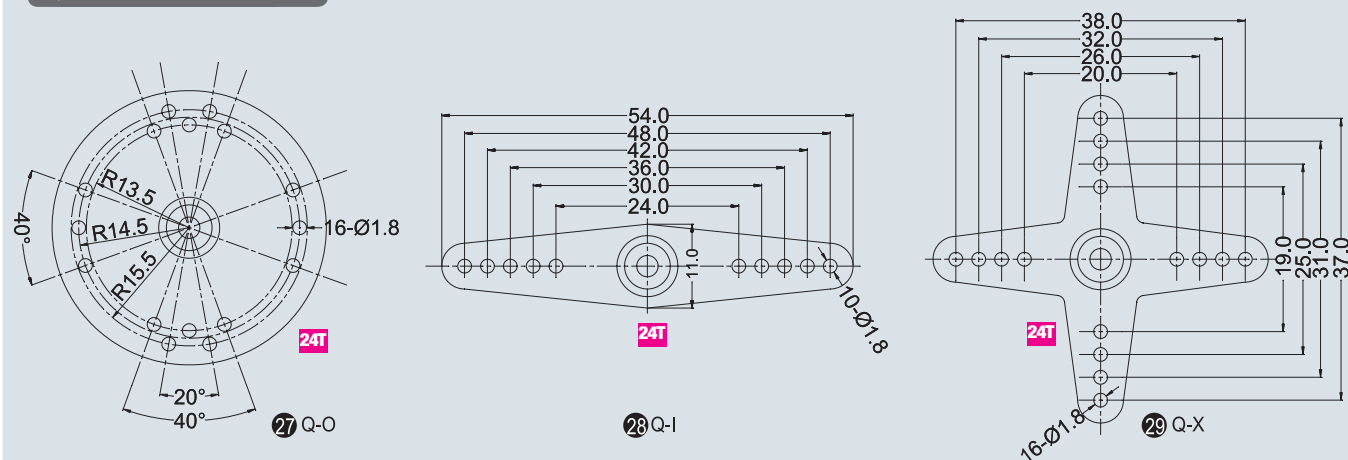
## MEGA HORN



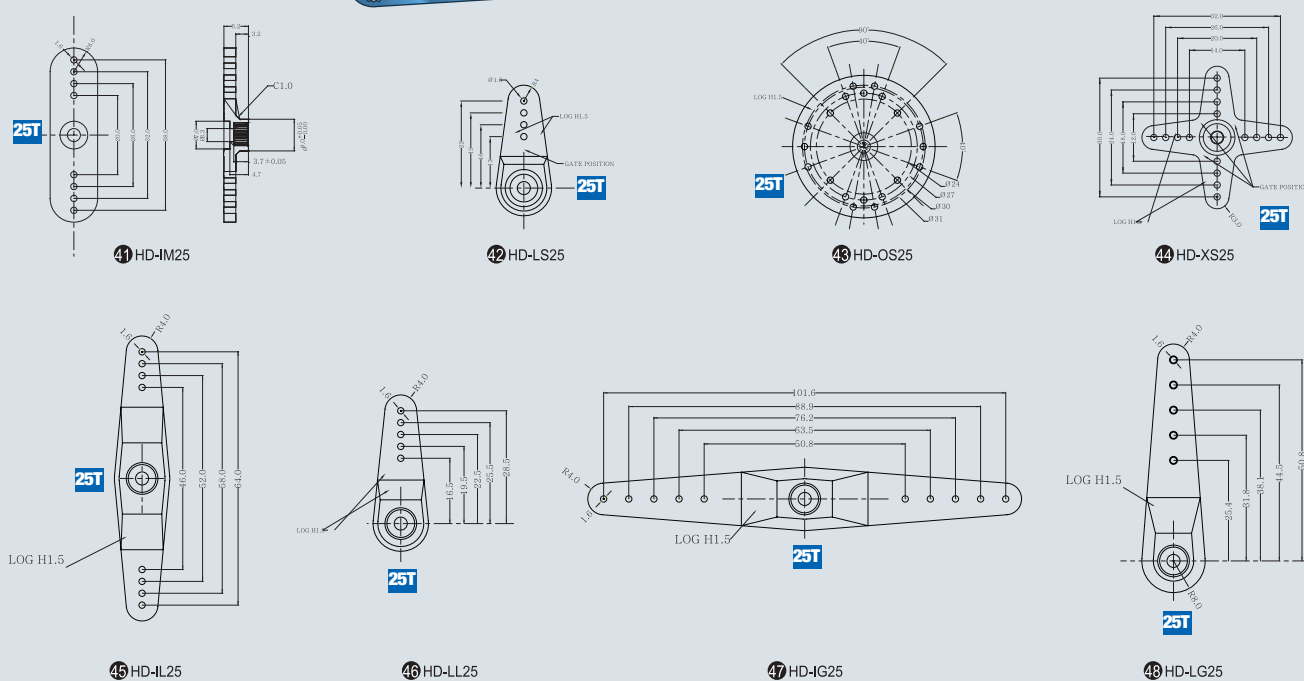
## METAL HORN ALUMINIUM



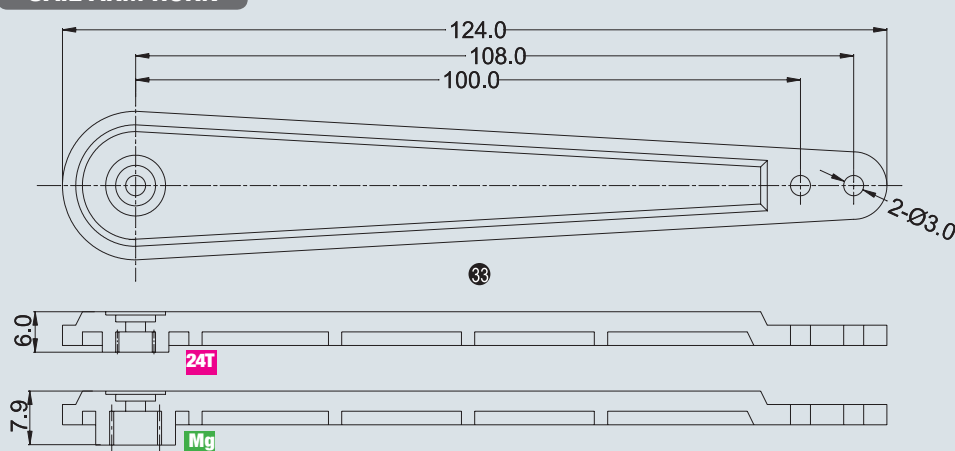
## QUARTER SCALE HORN



## H25T HORN



## SAIL ARM HORN





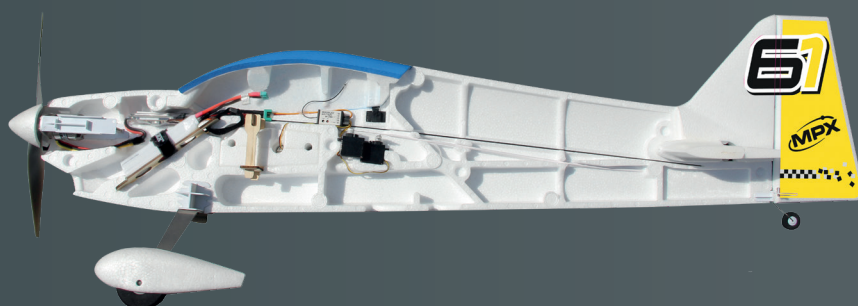
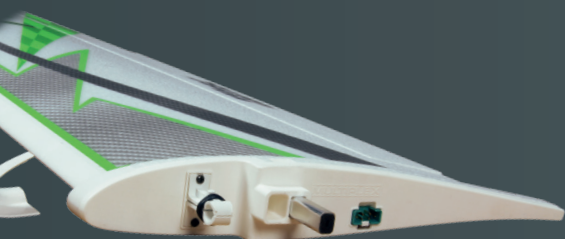
## PARTIKELSCHAUM PARTICLE FOAM

### Partikelschaum-ELAPOR®

MULTIPLEX ist der erste Hersteller, der Flugmodelle aus Partikelschaum in Großserie hergestellt und damit die Ära der Schaummodelle eingeleitet hat. Die in Deutschland entwickelte technologische Innovation markiert seit über einem Jahrzehnt die Qualitätsspitze und wird permanent weiter entwickelt. Der Großteil der MULTIPLEX-Flugmodelle wird in Deutschland hergestellt. Neueste Anwendungen vom ELAPOR®-Partikelschaum finden sich im Bereich der UAV/ UAS. Referenz: UAV TRINITY von Quantum-Systems. Auch hier bietet die ELAPOR®-Technologie enorme Vorteile. Das Material ist leicht, extrem robust, schlagfest, wetterfest, formstabil, preiswert und schnell zu reparieren. Formteile sind kostengünstig, auch in größeren Mengen zu reproduzieren.

Produkte aus ELAPOR® werden bei uns im Hause von Anfang bis Ende entwickelt. Das heißt, von der Idee bis zum fertigen Produkt wird jedes Projekt von unseren Ingenieuren und Technikern betreut. Ergänzend kann die gesamte Konfektionierung bis hin zur Endmontage angeboten werden.

Kontaktieren Sie uns für Ihre Aufgabe unter:  
+49 (0) 7252 58093-0 • [info@multiplex-cs.de](mailto:info@multiplex-cs.de)





## ELAPOR® particle foam

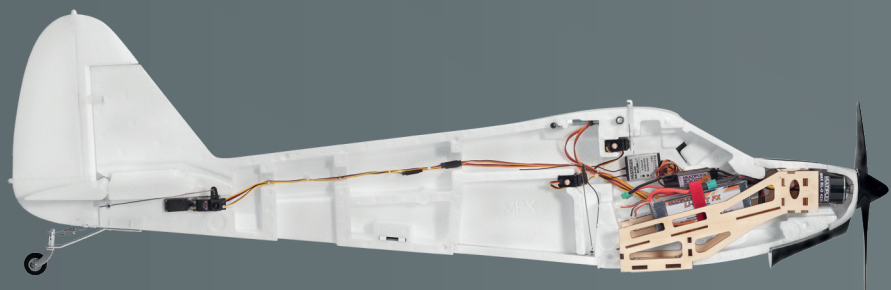
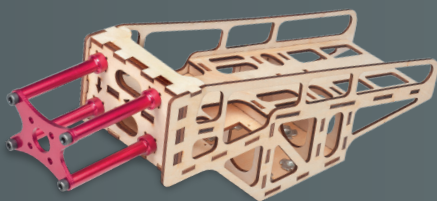
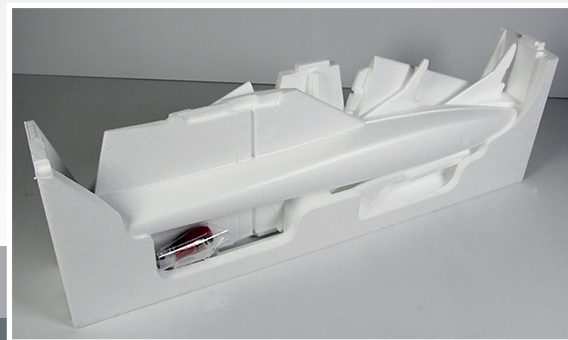
MULTIPLEX was the first manufacturer to commence large-scale production of model aircraft moulded in particle foam, thereby ushering in the era of foam models. This technological innovation was developed in Germany, and for more than a decade has been the benchmark for outstanding quality; development continues constantly. Most MULTIPLEX model aircraft are manufactured in Germany.

The latest applications for ELAPOR® particle foam are to be found in the field of the UAV / UAS. Reference: UAV TRINITY from Quantum Systems. This is another field in which ELAPOR® technology offers enormous advantages: the material is light in weight, extremely robust, impact-resistant, weatherproof, dimensionally stable, inexpensive and quick to repair. Moulded parts can be reproduced at low cost, even in large quantities.

We develop ELAPOR® products in-house, from start to finish, i.e. our own engineers and technicians supervise every project from the initial idea to the finished product. We can also provide the entire packaging process and even final assembly to complete our service.

Contact us with your project at:

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# ***RUXXY***® **POWER PEAK**®

## **Brushless-Motoren und Regler CUSTOMIZING**

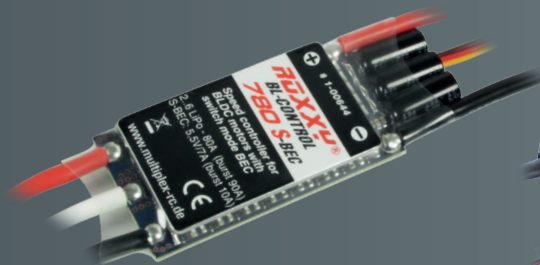
MULTIPLEX bietet eine große Auswahl an Brushless-Motoren und Reglern. Auf Anfrage können auch Sonderanfertigungen nach Ihren Spezifikationen produziert werden.

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## ***CUSTOMIZING brushless motors and speed controllers***

MULTIPLEX can supply a large selection of brushless motors and speed controllers. We can also produce custom-made articles to your specification upon request.

Contact us at:  
+49 (0) 7252 58093-0 • [info@multiplex-cs.de](mailto:info@multiplex-cs.de)





14 pole brushless outrunner motors

| Motorbezeichnung   <i>Motor type</i>      | X             | - XX      | - XX           | - XX         | AIR      |
|-------------------------------------------|---------------|-----------|----------------|--------------|----------|
| C = 2 Kugellager   <i>2 ball bearings</i> | Kugellager    | - Motor Ø | - Motor-Länge  | - U/min/Volt | - Lüfter |
| D = 3 Kugellager   <i>3 ball bearings</i> | ball bearings | - motor Ø | - motor length | - rpm/Volt   | - Fan    |

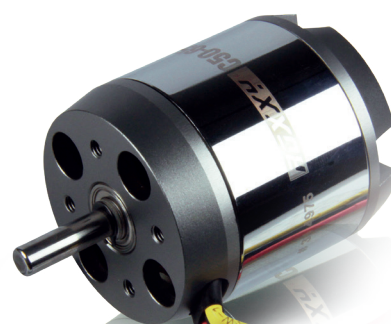
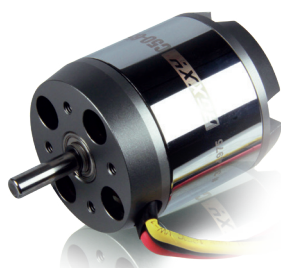
| #      | Bezeichnung<br>BL-Outrunner<br>designation | Ø Gehäuse<br>Ø Case<br>(mm) | U/min/Volt<br>RPM/range (V) | Spannungsbereich<br>Voltage current<br>(Volt) | Laststrom<br>Load current | Laststrom<br>Load current<br>(max.60sec.)(A) | Dauerleistung (W)<br>Continuous power | Max.Leistung<br>Max power<br>(60 sec.)(W) | Abmessung<br>Dimensions<br>(mm) | Gewicht<br>Weight<br>(g) | Ø Welle<br>Shaft<br>(mm) | Replacement<br>shaft<br>Ersatzwelle<br>(2 x) |
|--------|--------------------------------------------|-----------------------------|-----------------------------|-----------------------------------------------|---------------------------|----------------------------------------------|---------------------------------------|-------------------------------------------|---------------------------------|--------------------------|--------------------------|----------------------------------------------|
| 314940 | C18-20-2520                                | 18                          | 2520                        | 7-9                                           | 7                         | 10                                           | 50                                    | 80                                        | 18 x 26                         | 19                       | 2                        | 311820                                       |
| 314942 | C18-20-1650                                | 18                          | 1650                        | 7-15                                          | 5,5                       | 7                                            | 42                                    | 60                                        | 18 x 26                         | 19                       | 2                        | 311820                                       |
| 314938 | C18-15-2900                                | 18                          | 2900                        | 7-9                                           | 6,5                       | 8                                            | 40                                    | 55                                        | 18 x 21                         | 13                       | 2                        | 311815                                       |
| 314939 | C18-15-2000                                | 18                          | 2000                        | 7-12                                          | 4                         | 5                                            | 35                                    | 40                                        | 18 x 21                         | 13                       | 2                        | 311815                                       |
| 314943 | C22-14-2850                                | 22                          | 2850                        | 7-9                                           | 7,5                       | 9                                            | 50                                    | 65                                        | 22 x 21                         | 16                       | 2                        | 312214                                       |
| 314944 | C22-14-2280                                | 22                          | 2280                        | 7-15                                          | 4,5                       | 7                                            | 45                                    | 50                                        | 22 x 21                         | 16                       | 2                        | 312214                                       |
| 314945 | C22-16-2570                                | 22                          | 2570                        | 7-12                                          | 10                        | 13                                           | 65                                    | 100                                       | 22 x 23                         | 19                       | 2                        | 312216                                       |
| 314946 | C22-16-1800                                | 22                          | 1800                        | 7-15                                          | 7                         | 11                                           | 55                                    | 80                                        | 22 x 23                         | 19                       | 2                        | 312216                                       |
| 314948 | C22-20-1780                                | 22                          | 1780                        | 7-12                                          | 10                        | 12                                           | 70                                    | 120                                       | 22 x 27                         | 28                       | 2                        | 312220                                       |

| #      | Bezeichnung<br>Bl-Outrunner<br>designation | Ø Gehäuse<br>Ø Case<br>(mm) | U/min/Volt<br>RPM/range (V) | Spannungs-<br>bereich<br>Voltage<br>current<br>(Volt) | Laststrom<br>Load current | Laststrom<br>Load current<br>(max. 60sec.)<br>(A) | Dauerleistung<br>(W)<br>Continuous | Max. Leistung<br>Max power<br>(60 sec.) (W) | Abmessung<br>Dimensions<br>(mm) | Gewicht<br>Weight<br>(g) | Ø Welle<br>Shaft<br>(mm) | Replacement<br>shaft<br>Ersatzwelle<br>(2 x) |
|--------|--------------------------------------------|-----------------------------|-----------------------------|-------------------------------------------------------|---------------------------|---------------------------------------------------|------------------------------------|---------------------------------------------|---------------------------------|--------------------------|--------------------------|----------------------------------------------|
| 314986 | C22-16-800                                 | 22                          | 800                         | 10 - 25                                               | > 3                       | 5,3                                               | 45                                 | 60                                          | 22 x 23                         | 19                       | 2                        | 312216                                       |
| 314949 | C22-20-1330                                | 22                          | 1330                        | 7 - 12                                                | < 8                       | 10                                                | 60                                 | 110                                         | 22 x 27                         | 28                       | 2                        | 312220                                       |
| 314987 | C28-26-800                                 | 28                          | 800                         | 10 - 25                                               | > 6                       | 8                                                 | 120                                | 190                                         | 28 x 26                         | 45                       | 3,2                      | 312826                                       |
| 315078 | C28-24-1100                                | 28                          | 1100                        | 7 - 12                                                | 8                         | 9                                                 | 90                                 | 155                                         | 28 x 26                         | 48                       | 3,2                      | 312834                                       |
| 314988 | C35-30-800                                 | 35                          | 800                         | 7 - 15                                                | 13                        | 19                                                | 190                                | 250                                         | 35 x 26,5                       | 76                       | 4                        | 313530                                       |
| 314989 | C35-30-500                                 | 35                          | 500                         | 7 - 15                                                | 8                         | 12                                                | 110                                | 160                                         | 35 x 26,5                       | 75                       | 4                        | 313530                                       |
| 314990 | C35-30-300                                 | 35                          | 300                         | 10 - 25                                               | 5                         | 10                                                | 110                                | 160                                         | 35 x 26,5                       | 78                       | 4                        | 313530                                       |
| 314984 | C50-55-100                                 | 50                          | 100                         | 12                                                    | 16                        | 18                                                | 190                                | 215                                         | 50 x 48,5                       | 290                      | 6                        | 315055                                       |



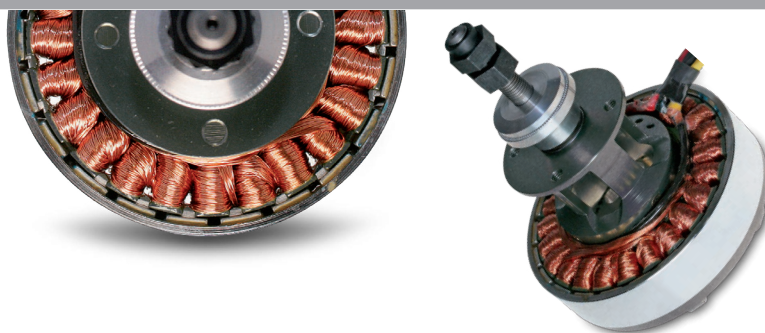
## Ø27-35 mm

| #       | Bezeichnung<br>BL-Outrunner<br>designation | Ø Gehäuse<br>Ø Case<br>(mm) | U/min/Volt<br>RPM/range (V) | Spannungsbereich<br>Voltage current<br>(Volt) | Laststrom<br>Load current | Laststrom<br>Load current<br>(max. 60sec.)(A) | Dauerleistung (W)<br>Continuous power | Max. Leistung<br>Max power<br>(60 sec.) (W) | Abmessung<br>Dimensions<br>(mm) | Gewicht<br>Weight<br>(g) | Ø Welle<br>Shaft<br>(mm) | Replacement<br>shaft<br>Ersatzwelle<br>(2 X) |
|---------|--------------------------------------------|-----------------------------|-----------------------------|-----------------------------------------------|---------------------------|-----------------------------------------------|---------------------------------------|---------------------------------------------|---------------------------------|--------------------------|--------------------------|----------------------------------------------|
| 1-00018 | C27-13-1800                                | 27                          | 1800                        | 12                                            | 11                        | 13                                            | 110                                   | 130                                         | 27 x 13                         | 20                       | 8,5/5                    |                                              |
| 1-01035 | C27-15-1050                                | 27                          | 1050                        | 7-12                                          | 12                        | 15                                            | 140                                   | 170                                         | 27 x 24                         | 27                       | 5,5                      | -                                            |
| 314777  | C28-15-1100                                | 28                          | 1100                        | 7-9                                           | 6                         | 7                                             | 40                                    | 62                                          | 28 x 25                         | 33                       | 3,2                      | 312815                                       |
| 314950  | C28-22-1380                                | 28                          | 1380                        | 7-15                                          | 8,5                       | 13                                            | 100                                   | 160                                         | 28 x 20                         | 30                       | 3,2                      | 312822                                       |
| 314951  | C28-22-1270                                | 28                          | 1270                        | 7-15                                          | 7,5                       | 11                                            | 90                                    | 140                                         | 28 x 20                         | 30                       | 3,2                      | 312822                                       |
| 314778  | C28-24-1380                                | 28                          | 1380                        | 7-12                                          | 9                         | 11                                            | 105                                   | 170                                         | 28 x 26                         | 48                       | 3,2                      | 312824                                       |
| 315078  | C28-24-1100                                | 28                          | 1100                        | 7-12                                          | 8                         | 9                                             | 90                                    | 155                                         | 28 x 26                         | 48                       | 3,2                      | 312824                                       |
| 314952  | C28-26-1900                                | 28                          | 1900                        | 7-12                                          | 20                        | 27                                            | 190                                   | 250                                         | 28 x 23                         | 30                       | 3,2                      | 312826                                       |
| 314953  | C28-26-1450                                | 28                          | 1450                        | 7-12                                          | 16                        | 24                                            | 170                                   | 240                                         | 28 x 23                         | 45                       | 3,2                      | 312826                                       |
| 314954  | C28-26-1260                                | 28                          | 1260                        | 7-12                                          | 13                        | 20                                            | 150                                   | 220                                         | 28 x 23                         | 45                       | 3,2                      | 312826                                       |
| 315079  | C28-27-930                                 | 28                          | 930                         | 7-12                                          | 10                        | 12                                            | 110                                   | 170                                         | 28 x 29                         | 57                       | 3,2                      | 312827                                       |
| 315080  | C28-27-760                                 | 28                          | 760                         | 7-12                                          | 9                         | 10                                            | 110                                   | 170                                         | 28 x 29                         | 57                       | 3,2                      | 312827                                       |
| 314955  | C28-30-1280                                | 28                          | 1280                        | 7-12                                          | 15                        | 25                                            | 220                                   | 300                                         | 28 x 30                         | 57                       | 3,2                      | 312830                                       |
| 314956  | C28-30-910                                 | 28                          | 910                         | 7-15                                          | 12                        | 21                                            | 210                                   | 260                                         | 28 x 30                         | 57                       | 3,2                      | 312830                                       |
| 314957  | C28-30-700                                 | 28                          | 700                         | 7-20                                          | 10                        | 17                                            | 180                                   | 220                                         | 28 x 30                         | 57                       | 3,2                      | 312830                                       |
| 314958  | C28-34-1120                                | 28                          | 1120                        | 7-15                                          | 23                        | 26                                            | 310                                   | 380                                         | 28 x 32                         | 67                       | 3,2                      | 312834                                       |
| 314959  | C28-34-880                                 | 28                          | 880                         | 7-15                                          | 17                        | 22                                            | 260                                   | 340                                         | 28 x 32                         | 67                       | 3,2                      | 312834                                       |
| 314960  | C28-34-750                                 | 28                          | 750                         | 7-15                                          | 14                        | 19                                            | 230                                   | 300                                         | 28 x 32                         | 67                       | 3,2                      | 312834                                       |
| 314980  | C35-30-1600                                | 35                          | 1600                        | 7-12                                          | 23                        | 40                                            | 220                                   | 450                                         | 35 x 30                         | 76                       | 4                        | 313530                                       |
| 314961  | C35-30-1330                                | 35                          | 1330                        | 7-15                                          | 26                        | 35                                            | 300                                   | 350                                         | 35 x 30                         | 78                       | 4                        | 313530                                       |
| 314962  | C35-30-950                                 | 35                          | 950                         | 7-15                                          | 20                        | 30                                            | 270                                   | 310                                         | 35 x 30                         | 78                       | 4                        | 313530                                       |
| 314963  | C35-36-1500                                | 35                          | 1500                        | 7-12                                          | 45                        | 55                                            | 550                                   | 750                                         | 35 x 33                         | 109                      | 4                        | 313536                                       |
| 314780  | C35-36-1250                                | 35                          | 1250                        | 7-12                                          | 40                        | 50                                            | 440                                   | 680                                         | 35 x 33                         | 109                      | 4                        | 313536                                       |
| 315081  | C35-36-950                                 | 35                          | 950                         | 7-15                                          | 18                        | 30                                            | 260                                   | 430                                         | 35 x 33                         | 105                      | 4                        | 313536                                       |
| 1-00616 | C35-42-1160                                | 35                          | 1160                        | 7-12                                          | 50                        | 60                                            | 630                                   | 720                                         | 35 x 38                         | 140                      | 5                        |                                              |
| 314964  | C35-42-1100                                | 35                          | 1100                        | 7-15                                          | 50                        | 65                                            | 680                                   | 850                                         | 35 x 38                         | 132                      | 5                        | 313542                                       |
| 314965  | C35-42-930                                 | 35                          | 930                         | 7-15                                          | 38                        | 65                                            | 680                                   | 850                                         | 35 x 38                         | 132                      | 5                        | 313542                                       |
| 314966  | C35-42-810                                 | 35                          | 810                         | 7-15                                          | 32                        | 45                                            | 510                                   | 660                                         | 35 x 38                         | 132                      | 5                        | 313542                                       |
| 314982  | C35-48-1300                                | 35                          | 1300                        | 7-12                                          | 33                        | 45                                            | 490                                   | 680                                         | 35 x 45                         | 172                      | 5                        | 313548                                       |
| 315082  | C35-48-1150                                | 35                          | 1150                        | 7-12                                          | 30                        | 40                                            | 450                                   | 600                                         | 35 x 45                         | 169                      | 5                        | 313548                                       |
| 315076  | C35-48-990                                 | 35                          | 990                         | 7-12                                          | 44                        | 50                                            | 490                                   | 800                                         | 35 x 45                         | 173                      | 5                        |                                              |
| 314967  | C35-48-830                                 | 35                          | 830                         | 7-15                                          | 45                        | 60                                            | 670                                   | 900                                         | 35 x 45                         | 172                      | 5                        | 313548                                       |
| 314779  | C35-48-700                                 | 35                          | 700                         | 10-20                                         | 35                        | 50                                            | 750                                   | 1000                                        | 35 x 45                         | 172                      | 5                        | 313548                                       |
| 314996  | D35-50-1150                                | 35                          | 1150                        | 7-20                                          | 50                        | 65                                            | 700                                   | 900                                         | 35 x 50                         | 152                      | 4                        | 313550                                       |
| 314995  | D35-50-850                                 | 35                          | 850                         | 7-20                                          | 38                        | 45                                            | 480                                   | 750                                         | 35 x 50                         | 152                      | 4                        | 313550                                       |
| 314997  | D35-55-900                                 | 35                          | 900                         | 7-15                                          | 45                        | 60                                            | 750                                   | 1000                                        | 35 x 55                         | 175                      | 4                        | 313555                                       |
| 314998  | D35-55-590                                 | 35                          | 590                         | 7-20                                          | 35                        | 45                                            | 700                                   | 900                                         | 35 x 55                         | 175                      | 4                        | 313555                                       |



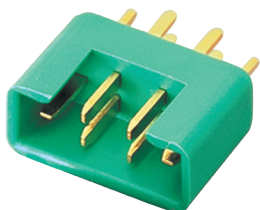
## Ø42-88 mm

| #      | Bezeichnung<br>BL-Outrunner<br>designation | Ø Gehäuse<br>Ø Case<br>(mm) | U/min/Volt<br>RPM/range (V) | Spannungsbereich<br>Voltage current<br>(Volt) | Laststrom<br>Load current | Laststrom<br>Load current<br>(max 60sec.)(A) | Dauerleistung (W)<br>Continuous power | Max. Leistung<br>Max power<br>(60 sec.) (W) | Abmessung<br>Dimensions<br>(mm) | Gewicht<br>Weight<br>(g) | Ø Welle<br>Shaft<br>(mm) | Replacement shaft<br>Ersatzwelle<br>(2 x) |
|--------|--------------------------------------------|-----------------------------|-----------------------------|-----------------------------------------------|---------------------------|----------------------------------------------|---------------------------------------|---------------------------------------------|---------------------------------|--------------------------|--------------------------|-------------------------------------------|
| 314968 | C42-40-980                                 | 42                          | 980                         | 7 - 15                                        | < 40                      | 50                                           | 550                                   | 650                                         | 42 x 37                         | 130                      | 5                        |                                           |
| 314969 | C42-40-850                                 | 42                          | 850                         | 7 - 15                                        | < 35                      | 40                                           | 480                                   | 580                                         | 42 x 37                         | 130                      | 5                        |                                           |
| 314970 | C42-50-1000                                | 42                          | 1000                        | 10 - 20                                       | < 65                      | 80                                           | 950                                   | 1380                                        | 42 x 47                         | 195                      | 5                        | 314250                                    |
| 314971 | C42-50-800                                 | 42                          | 800                         | 10 - 20                                       | < 58                      | 70                                           | 850                                   | 1250                                        | 42 x 47                         | 195                      | 5                        | 314250                                    |
| 314781 | C42-50-720                                 | 42                          | 720                         | 10 - 20                                       | < 50                      | 60                                           | 810                                   | 1120                                        | 42 x 47                         | 195                      | 5                        | 314250                                    |
| 314972 | C42-60-710                                 | 42                          | 710                         | 10 - 20                                       | < 58                      | 85                                           | 110                                   | 1750                                        | 42 x 56                         | 282                      | 5                        | 314260                                    |
| 314973 | C42-60-600                                 | 42                          | 600                         | 10 - 20                                       | < 47                      | 75                                           | 1000                                  | 1600                                        | 42 x 56                         | 287                      | 5                        | 314260                                    |
| 314999 | D42-65-430                                 | 42                          | 430                         | 10 - 24                                       | 42                        | 72                                           | 1050                                  | 1650                                        | 42 x 65                         | 280                      | 5                        | 314265                                    |
| 314974 | C50-55-760                                 | 50                          | 760                         | 10 - 20                                       | < 60                      | 90                                           | 1100                                  | 1665                                        | 50 x 51                         | 276                      | 6                        | 315055                                    |
| 314782 | C50-55-570                                 | 50                          | 570                         | 15 - 24                                       | < 50                      | 80                                           | 1000                                  | 1550                                        | 50 x 51                         | 276                      | 6                        | 315055                                    |
| 314975 | C50-65-435                                 | 50                          | 435                         | 15 - 24                                       | < 52                      | 90                                           | 1500                                  | 2250                                        | 50 x 61                         | 377                      | 6                        | 315065                                    |
| 314783 | C50-65-335                                 | 50                          | 335                         | 15 - 30                                       | < 48                      | 80                                           | 1400                                  | 2100                                        | 50 x 51                         | 377                      | 6                        | 315065                                    |
| 314665 | D50-65-330                                 | 50                          | 330                         | 15 - 30                                       | 55                        | 75                                           | 1400                                  | 2100                                        | 50 x 65                         | 405                      | 6                        | 315165                                    |
| 314664 | D50-65-400                                 | 50                          | 400                         | 15 - 30                                       | 60                        | 82                                           | 1500                                  | 2150                                        | 50 x 65                         | 405                      | 6                        | 315165                                    |
| 314666 | D50-65-290                                 | 50                          | 290                         | 20 - 36                                       | 50                        | 70                                           | 1350                                  | 2050                                        | 50 x 65                         | 405                      | 6                        | 315165                                    |
| 314976 | C63-62-320                                 | 63                          | 320                         | 20 - 40                                       | < 80                      | 90                                           | 1750                                  | 2850                                        | 63 x 62                         | 662                      | 8                        | 316362                                    |
| 314977 | C63-62-250                                 | 63                          | 250                         | 20 - 40                                       | < 70                      | 80                                           | 1680                                  | 2600                                        | 63 x 62                         | 662                      | 8                        | 316362                                    |
| 314992 | D63-72-200 AIR                             | 63                          | 200                         | 20 - 50                                       | 70                        | 82                                           | 2200                                  | 2850                                        | 63 x 72                         | 695                      | 8                        | 316372                                    |
| 314993 | D63-72-230 AIR                             | 63                          | 230                         | 20 - 50                                       | 75                        | 86                                           | 2300                                  | 2950                                        | 63 x 72                         | 695                      | 8                        | 316372                                    |
| 314667 | F45-59-900 Heli                            | 45                          | 900                         | 20 - 45                                       | 42                        | 72                                           | 1550                                  | 2600                                        | 45 x 57                         | 340                      | 6                        | 314559                                    |



## ZUBEHÖR ACCESSORIES

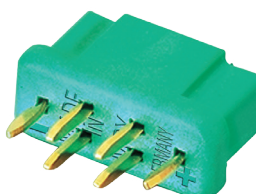
MPX-Stecker **M6-50** (grün)  
MPX plug **M6-50** (green)



# 1-01219 3 Stück / 3pcs  
# 1-01221 100 Stück / 100pcs



MPX-Buchse **M6-50** (grün)  
MPX socket **M6-50** (green)



# 1-01220 3 Stück / 3pcs  
# 1-01222 100 Stück / 100pcs



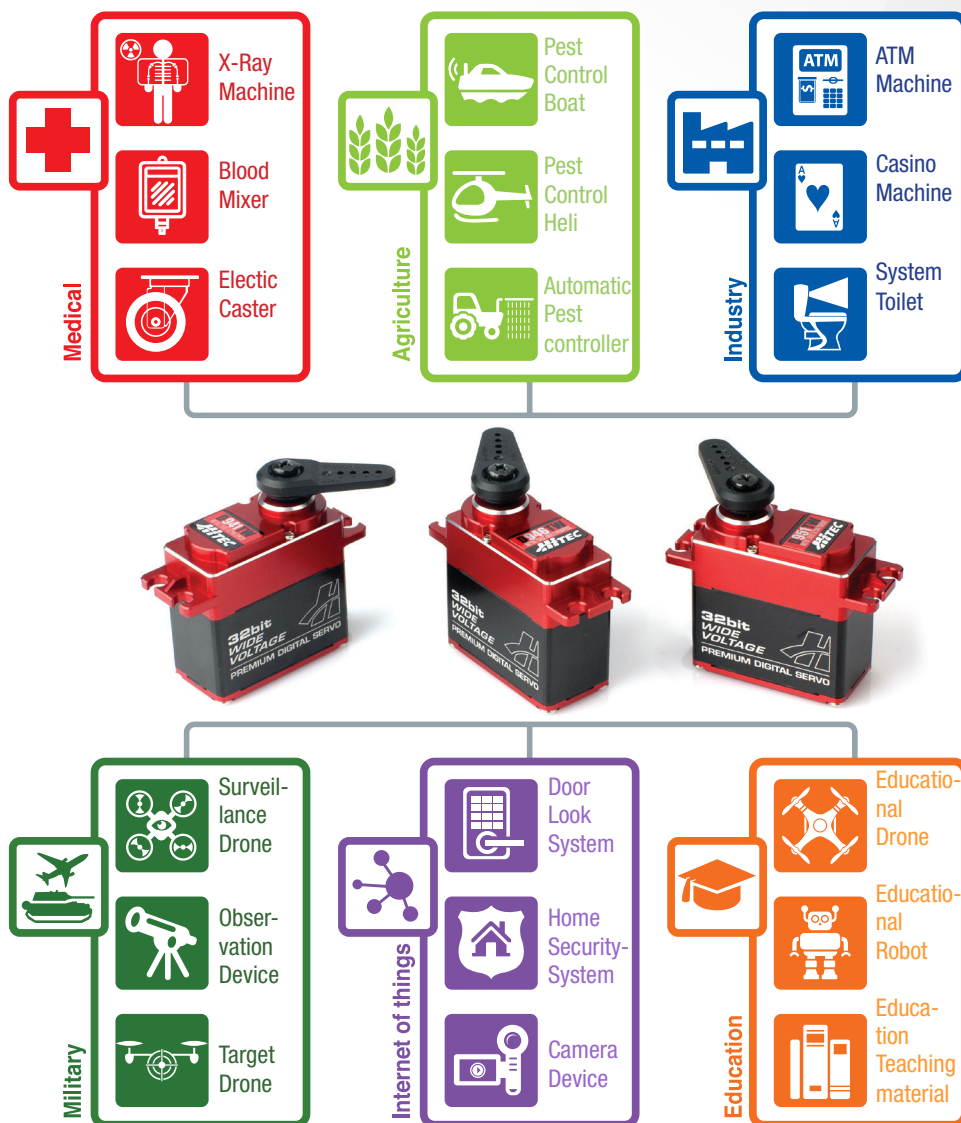
**Brandschutzklasse UL 94 V-0**  
**Flammability UL 94 V-0**

# REFERENZEN & ANWENDUNGSBEISPIELE REFERENCES & TYPICAL APPLICATIONS

Quelle:  
Hitec RCD Korea, Inc.



HiTEC Servo Actuators are already being used for more than 300 applications nearby you.







Anwendungsbeispiel für HiTEC-Servos  
Hier im Roboter-Arm

*Typical application for HiTEC servos –  
here in a robot arm.*



Anwendungsbeispiel für HiTEC-  
Customized Servos

Hier von Firma Qioptiq als  
Blendensteuerung und Filtersteuerung  
eines Objektivs für eine  
Medizintechnikanwendung

*Typical application for  
HiTEC customized servos*

*In this case used by the Qioptiq company  
to control lens aperture and filter  
for an application in technical medicine*



Foto: QIOPTIQ



Foto: QIOPTIQ

Mit freundlicher Unterstützung von



**holbach**  
UMWELTANALYTIK

Umweltanalytik Holbach GmbH  
Sperberweg 3 • D-66687 Wadern • [www.holbach.biz](http://www.holbach.biz)



Foto: Robotzone, LLC

## Anwendungsbeispiel für HiTEC-Servos

Hier in einem Robotergetriebe

### *Typical application for HiTEC servos*

*In this case in a robot gearbox*

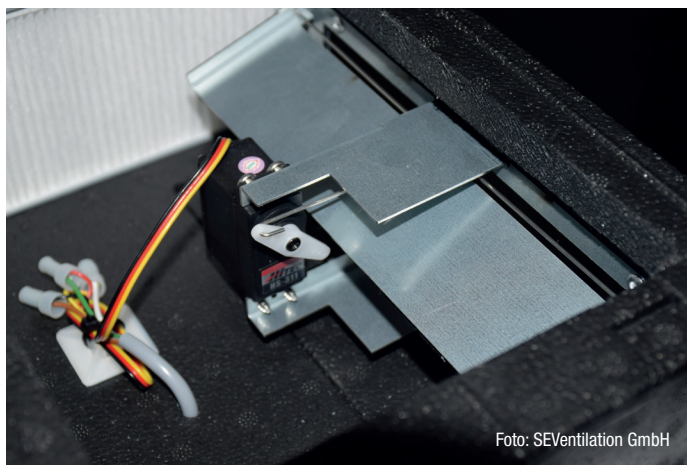


Foto: SEVentilation GmbH

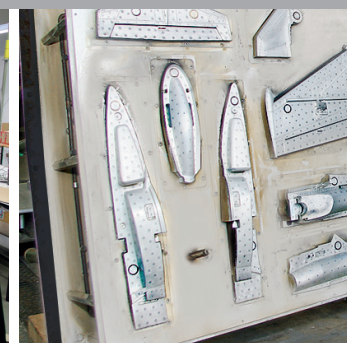
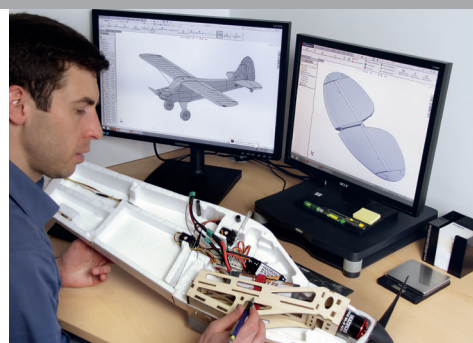
## Anwendungsbeispiel für HiTEC-Servos

Hier als Klappensteuerung

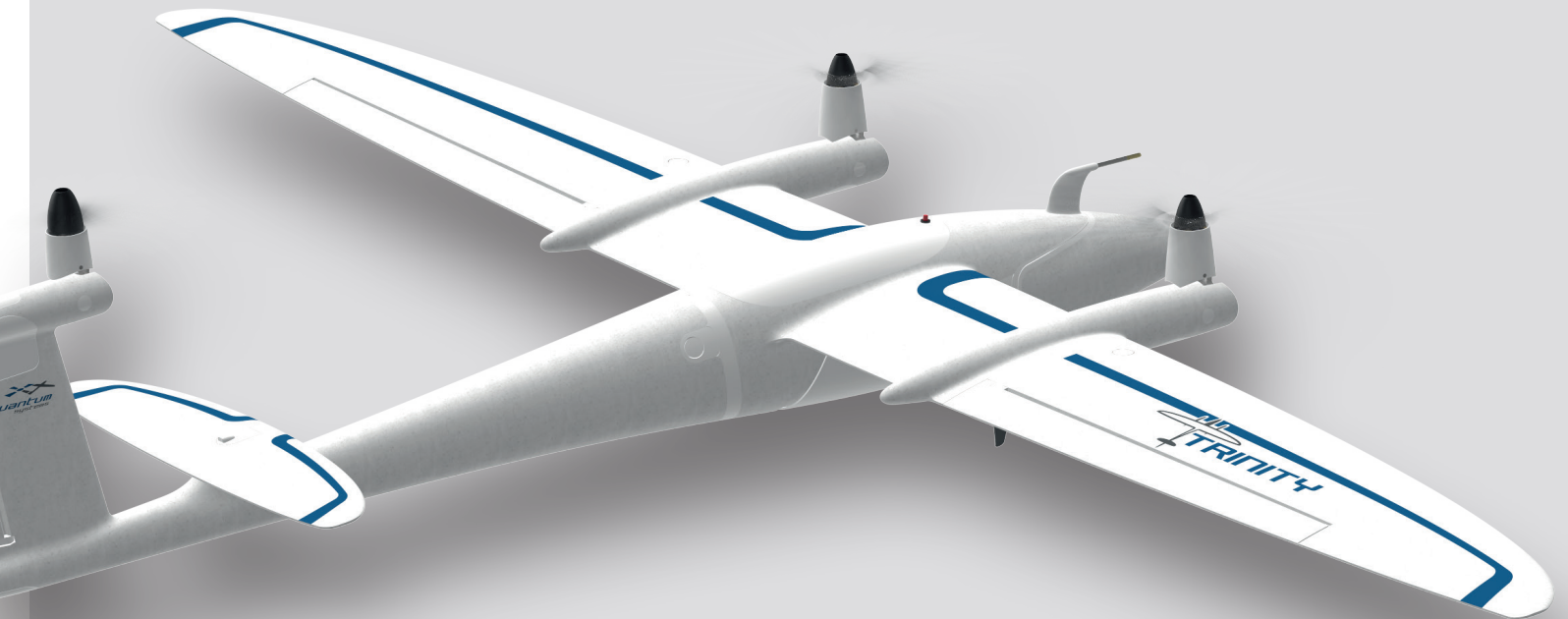
### *Typical application for HiTEC servos*

*In this case for flap control*

Mit freundlicher Unterstützung von







### Anwendungsbeispiel für ELAPOR®

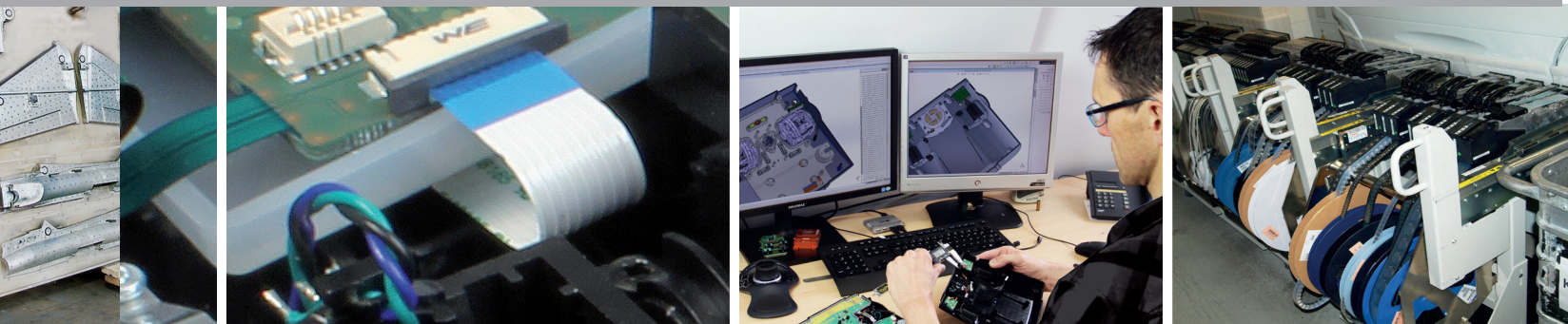
Hier bei der kommerziellen Drohne „Trinity“  
von Quantum-Systems

### Typical application for ELAPOR®

Shown here is the commercial  
“Trinity” drone from Quantum Systems



Im Vertrieb von:  
Quantum-Systems GmbH  
Sonderflughafen Oberpfaffenhofen  
Friedrichshafenerstr. 2  
82205 Gilching  
[www.quantum-systems.com](http://www.quantum-systems.com)





# MULTIPLEX<sup>®</sup>

## COMMERCIAL SOLUTIONS

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