

### SERVO MOTOR 089LDA15X

## 1000KG PAYLOAD AGV SOLUTION



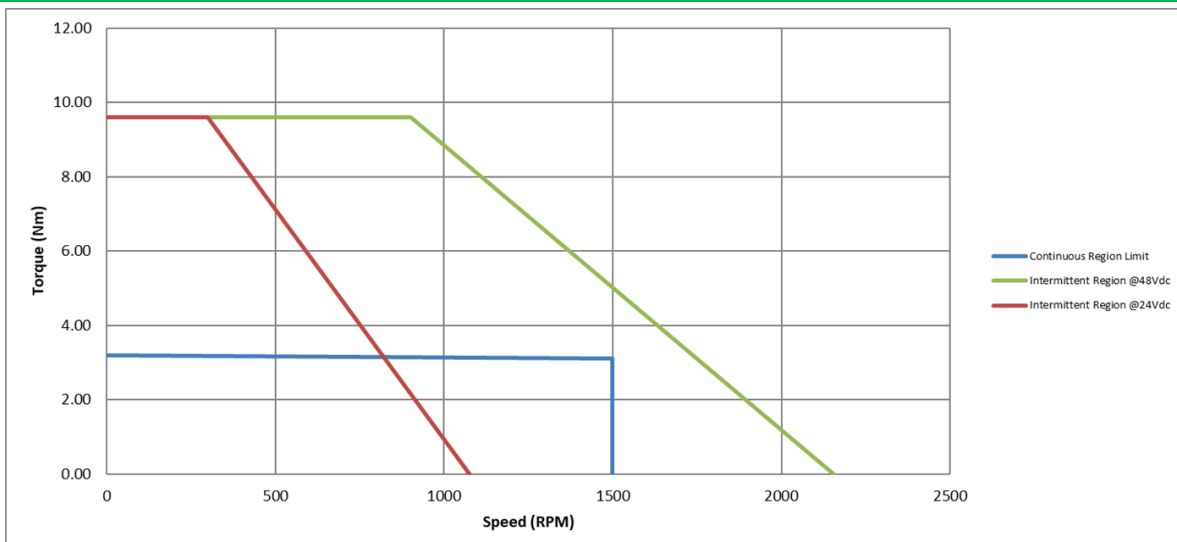
#### Definition

| Type                 | Unimotor HD      |                                                  |
|----------------------|------------------|--------------------------------------------------|
| Frame Size (mm)      | <b>089</b>       |                                                  |
| Voltage              | <b>L</b>         | 40-50V DC                                        |
| Magnet type          | <b>D</b>         | D - High dynamic                                 |
| Frame Length         | <b>A</b>         |                                                  |
| Speed (min-1)        | <b>15</b>        | 1500 @ 48V – 750rpm @24V                         |
| Brake                | <b>X</b>         | Braked                                           |
| Connection type      | <b>F</b>         | Integrated Flying Cable                          |
| Output shaft         | <b>G</b>         | Integrated Gearbox Shaft                         |
| Feedback device code | <b>CJ</b>        | CJ – Renco R35i encoder 4096 5PP push-pull comms |
| Inertia & thermistor | <b>G</b>         | G – standard inertia + no thermistor             |
| PCD (Gbox)           | <b>100</b>       | 100 (Gear box)                                   |
| Shaft Diameter       | <b>620</b>       | G BOX output                                     |
| Insulation class     | <b>F</b>         |                                                  |
| UL Motor / UL Stator | <b>UL Stator</b> |                                                  |

#### Nominal characteristics

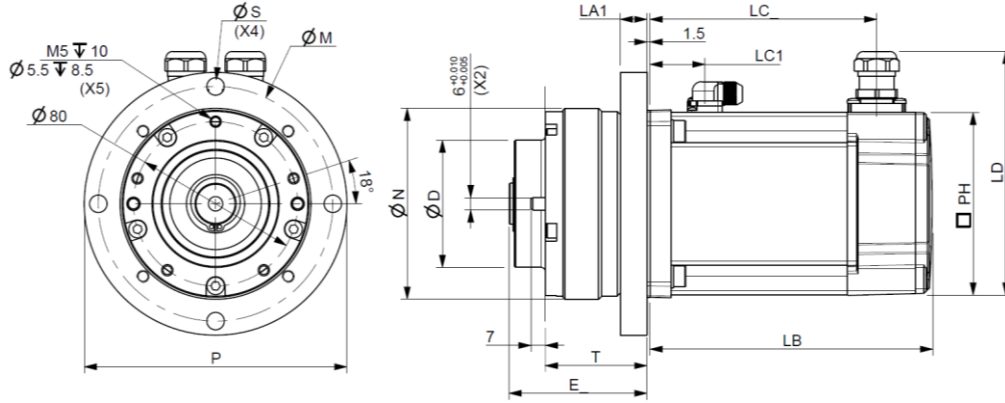
|                                            |               |                                        |                 |
|--------------------------------------------|---------------|----------------------------------------|-----------------|
| Motor Ambient Operating Temperature (°C)   | 0 to 40       | Motor Ambient Storage Temperature (°C) | -15 to 40       |
| Motor Peak Torque (Nm)                     | 9.6           |                                        |                 |
| Motor Stall Torque (Nm)                    | 3.2           | Stall Current                          | 13.0            |
| Rated Torque (Nm)                          | 3             | Rated Current (A)                      | 12.7            |
| Rated Power (kW) @ 48V                     | 0.5           | Rated Power (kW) @ 24V                 | 0.25            |
| Winding Thermal Time Constant (s)          | 93            | Kt (Nm/A)                              | 0.24            |
| Number of Poles                            | 10            | Ke (V/kmin-1)                          | 15.17           |
| Maximum Cogging (Nm)                       | 0.1           | R (ph-ph) (Ohm)                        | 0.26            |
| Inertia Motor + GBox (kg.cm <sup>2</sup> ) | 6.5           | L (ph-ph) (mH)                         | 1.64            |
| Ingress Protection Level (IP)              | 40            | Weight (kg) Motor + gearbox            | 6.5             |
| Intermittent Torque (Nm)                   | 4.8 (S3 Duty) |                                        |                 |
| Intermittent Power (kW)                    | 0.7 (S3 Duty) | Intermittent Current (A)               | 20.25 (S3 Duty) |
| <b>Brake</b>                               | 06 Type       | Static Torque (N.m)                    | 4               |
| Release Time (ms)                          | <150ms        | Backlash (°)                           | TBA             |
| Brake Supply Voltage (V)                   | 24            | Brake Coil Power (W)                   | 15              |

#### Motor Torque / speed graph



### SERVO MOTOR 089LDA15X

#### Motors (° & mm)



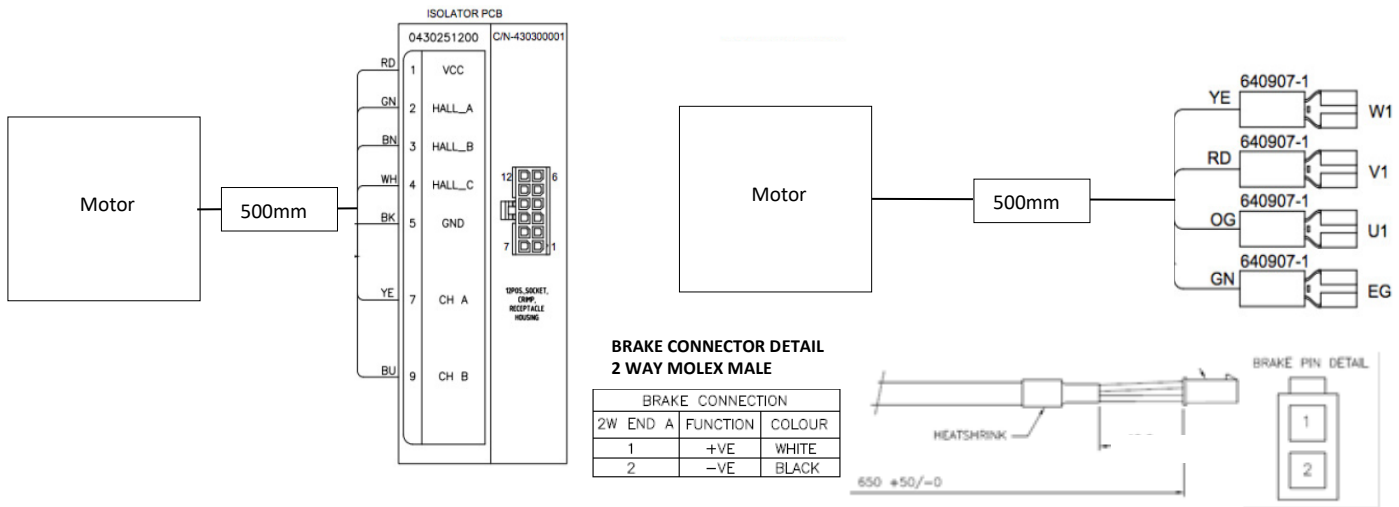
|     |                          |          |
|-----|--------------------------|----------|
| LB  | Motor Total length       | 137.8±1  |
| LC  | Gland position           | 110.5±1  |
| LA1 | Flange thickness         | 13±0.1   |
| T   | Register Length          | 49.5±0.1 |
| N   | GBox Clearance Dia       | 93 h7    |
| LD  | Connector overall height | 119±1    |
| P   | Flange GBox Dia          | 128      |
| S   | Fixing Hole Diameter     | 8.5      |
| M   | Fixing hole PCD          | 114.3    |
| PH  | Motor Housing Width      | 89±0.3   |
| E   | GBox Length              | 67.2     |
| D   | GBox Register Diameter   | 62±0.07  |
| LC1 | Brake Connector position | 20.8±0.4 |
|     | Motor+Gbox Total Length  | 206.5    |
|     | Mounting Bolt            | M8       |

#### Motor electrical interface Flying leads option:

| Feedback device code:                            |       |        |    |        |      | Connection type: |       |                    |
|--------------------------------------------------|-------|--------|----|--------|------|------------------|-------|--------------------|
| CJ – Renco R35i encoder 4096 5PP push-pull comms |       |        |    |        |      |                  |       |                    |
| 1                                                | Red   | Power  | 7  | Yellow | CH A | 1                | U     | Red (x 1)          |
| 2                                                | Green | HALL A | 8  | -      | -    | 2                | V     | Orange (x 1)       |
| 3                                                | Brown | HALL B | 9  | Blue   | CH B | 3                | W     | Yellow (x 1)       |
| 4                                                | White | HALL C | 10 |        |      | 4                | Earth | Green/Yellow (x 1) |
| 5                                                | Black | GND    | 11 |        |      |                  |       |                    |
| 6                                                | Red   |        | 12 |        |      |                  |       |                    |

|                                                                                                   |                                                                                                                                                             |
|---------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Signal Cable (28 AWG): 500mm<br>(from gland to customer end)<br>12-Way MOLEX Connector 43025-1200 | Power Cable: 500mm<br>(from gland to customer end)<br>4 cores of 16 AWG UL wire, with polyolefin heat shrink sleeve<br>Spade terminals fitted to lead wires |
|---------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|



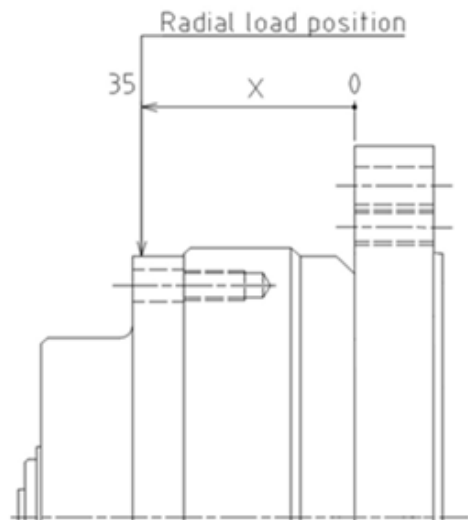
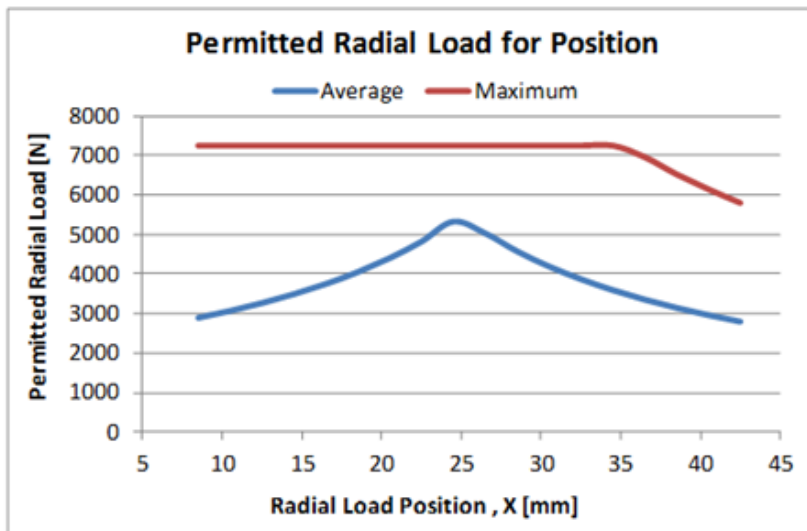
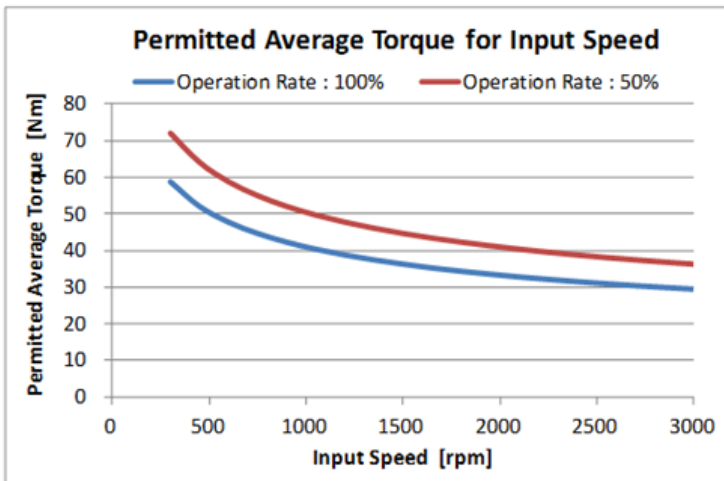
Enquiry N°: 880

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**SERVO MOTOR 089LDA15X**

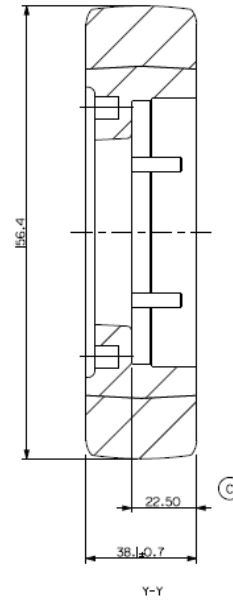
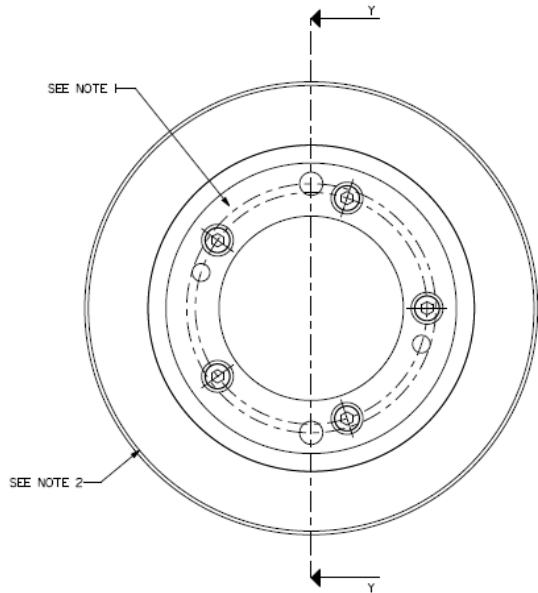
**Gear Box characteristics**

|                               |      |                                             |      |
|-------------------------------|------|---------------------------------------------|------|
| Ratio                         | 9    | Backlash (arc/min)                          | ≤7   |
| Stages                        | 1    | Radial Load (Fr, N) @ Fa=0, Input Speed Nom | 3500 |
| Inertia (kg.cm <sup>2</sup> ) | ~0.2 | Radial Load MAX (Fr, N)                     | 7250 |
| Weight (kg)                   | 2.7  | Axial Load (Fa, N) @ Fr=0, Input Speed Nom  | 2200 |
| Efficiency                    | 95%  |                                             |      |



### SERVO MOTOR 089LDA15X

#### Wheel Specification



#### NOTES:

1. CORE INFORMATION
  - MATERIAL: HT200 CAST IRON.
  - FINISH: PAINT BLACK.
2. TYRE INFORMATION
  - MATERIAL: POLYESTER BASED POLYURETHANE
  - THERMOSET CASTABLE
3. M5 x 15 CAP HEX B2P MOUNTING BOLTS (X5)

### SERVO MOTOR 089LDA30X

## 1000KG PAYLOAD AGV SOLUTION



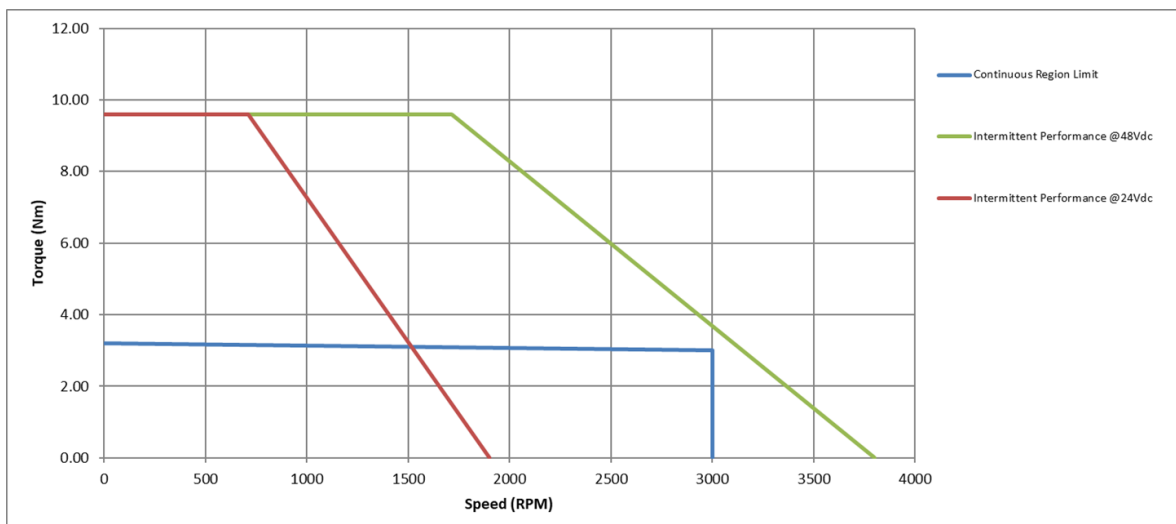
#### Definition

|                      |                  |                                                  |
|----------------------|------------------|--------------------------------------------------|
| Type                 | Unimotor HD      |                                                  |
| Frame Size (mm)      | <b>089</b>       |                                                  |
| Voltage              | <b>L</b>         | 40-50V DC                                        |
| Magnet type          | <b>D</b>         | D - High dynamic                                 |
| Frame Length         | <b>A</b>         |                                                  |
| Speed (min-1)        | <b>30</b>        | 3000 @ 48V - 1500 @ 24V                          |
| Brake                | <b>X</b>         | Braked                                           |
| Connection type      | <b>F</b>         | Integrated Flying Cable                          |
| Output shaft         | <b>G</b>         | Integrated Gearbox Shaft                         |
| Feedback device code | <b>CJ</b>        | CJ – Renco R35i encoder 4096 5PP push-pull comms |
| Inertia & thermistor | <b>G</b>         | G – standard inertia + no thermistor             |
| PCD (Gbox)           | <b>100</b>       | 100 (Gear box)                                   |
| Shaft Diameter       | <b>620</b>       | G BOX output                                     |
| Insulation class     | <b>F</b>         |                                                  |
| UL Motor / UL Stator | <b>UL Stator</b> |                                                  |

#### Nominal characteristics

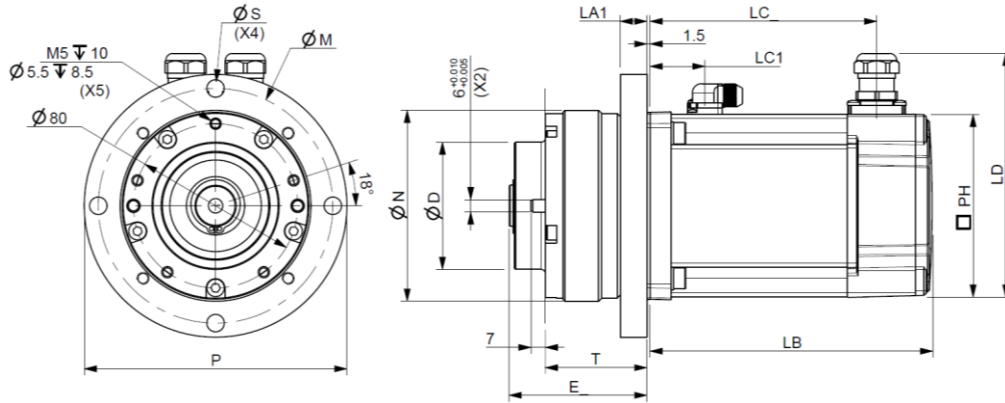
|                                            |               |                                        |                 |
|--------------------------------------------|---------------|----------------------------------------|-----------------|
| Motor Ambient Temperature (°C)             | 0 to 40       | Motor Ambient Storage Temperature (°C) | -15 to 40       |
| Motor Peak Torque (Nm)                     | 9.6           |                                        |                 |
| Motor Stall Torque (Nm)                    | 3.2           | Stall Current                          | 23.0            |
| Rated Torque (Nm)                          | 3             | Rated Current (A)                      | 21.6            |
| Rated Power (kW) @ 48V                     | 0.94          | Rated Power (kW) @ 24V                 | 0.47            |
| Winding Thermal Time Constant (s)          | 93            | Kt (Nm/A)                              | 0.14            |
| Number of Poles                            | 10            | Ke (V/kmin-1)                          | 8.5             |
| Maximum Cogging (Nm)                       | 0.1           | R (ph-ph) (Ohm)                        | 0.08            |
| Inertia Motor + GBox (kg.cm <sup>2</sup> ) | 6.5           | L (ph-ph) (mH)                         | 0.43            |
| Ingress Protection Level (IP)              | 40            | Weight (kg) Motor + gearbox            | 6.5             |
| Intermittent Torque (Nm)                   | 4.8 (S3 Duty) |                                        |                 |
| Intermittent Power (kW)                    | 0.7 (S3 Duty) | Intermittent Current (A)               | 34.29 (S3 Duty) |
| <b>Brake</b>                               | 06 Type       | Static Torque (N.m)                    | 10.0            |
| Release Time (ms)                          | 72.8          | Backlash (°)                           | 0.45            |
| Brake Supply Voltage (V)                   | 24            | Brake Coil Power (W)                   | 18.5            |

#### Torque / speed graph



### SERVO MOTOR 089LDA30X

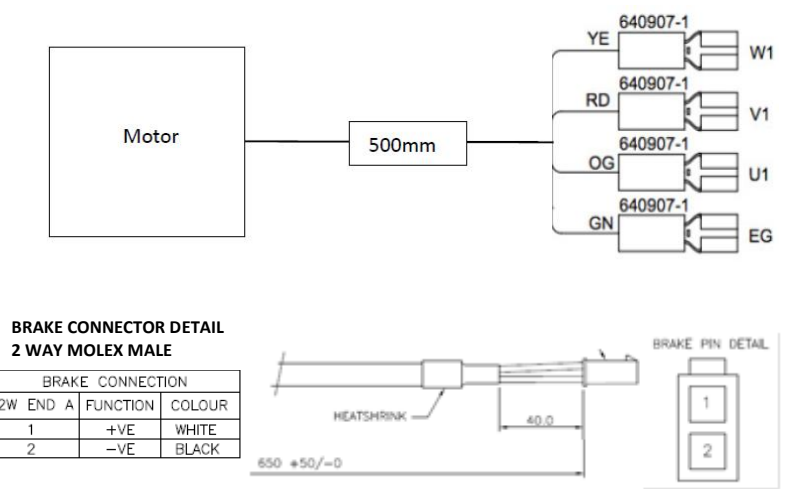
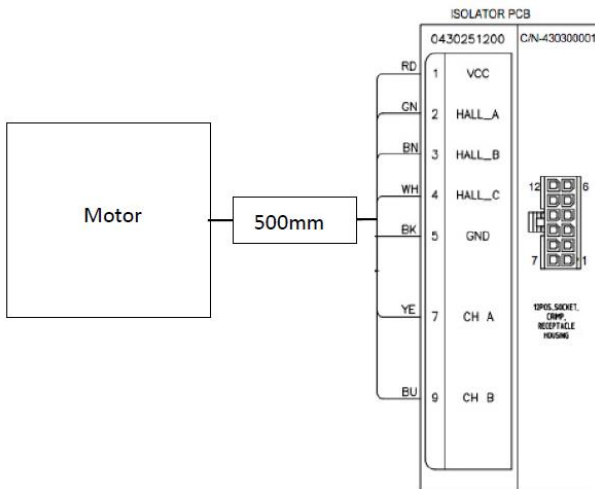
#### Motors (° & mm)



|     |                          |          |
|-----|--------------------------|----------|
| LB  | Motor Total length       | 137.8±1  |
| LC  | Gland position           | 110.5±1  |
| LA1 | Flange thickness         | 13±0.1   |
| T   | Register Length          | 49.5±0.1 |
| N   | GBox Clearance Dia       | 93 h7    |
| LD  | Connector overall height | 119±1    |
| P   | Flange GBox Dia          | 128      |
| S   | Fixing Hole Diameter     | 8.5      |
| M   | Fixing hole PCD          | 114.3    |
| PH  | Motor Housing Width      | 89±0.3   |
| E   | GBox Length              | 67.2     |
| D   | GBox Register Diameter   | 62±0.07  |
| LC1 | Brake Connector position | 20.8±0.4 |
|     | Motor+Gbox Total Length  | 206.5    |
|     | Mounting Bolt            | M8       |

#### Motor electrical interface Flying leads option:

| Feedback device code:                                                                                 |       |        |    |        |      | Connection type:                                                                                                                                                      |       |                    |
|-------------------------------------------------------------------------------------------------------|-------|--------|----|--------|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|--------------------|
| CJ – Renco R35i encoder 4096 5PP push-pull comms                                                      |       |        |    |        |      |                                                                                                                                                                       |       |                    |
| 1                                                                                                     | Red   | Power  | 7  | Yellow | CH A | 1                                                                                                                                                                     | U     | Red (x 1)          |
| 2                                                                                                     | Green | HALL A | 8  |        | -    | 2                                                                                                                                                                     | V     | Orange (x 1)       |
| 3                                                                                                     | Brown | HALL B | 9  | Blue   | CH B | 3                                                                                                                                                                     | W     | Yellow (x 1)       |
| 4                                                                                                     | White | HALL C | 10 |        |      | 4                                                                                                                                                                     | Earth | Green/Yellow (x 1) |
| 5                                                                                                     | Black | GND    | 11 |        |      |                                                                                                                                                                       |       |                    |
| 6                                                                                                     | Red   |        | 12 |        |      |                                                                                                                                                                       |       |                    |
| <b>SIG Cable (28 AWG): 500mm</b><br>(from gland to customer end)<br>12-Way MOLEX Connector 43025-1200 |       |        |    |        |      | <b>PWR Cable: 500mm</b><br>(from gland to customer end)<br>4 cores of 16 AWG UL 1330 wire, with polyolefin heat shrink sleeve<br>Spade terminals fitted to lead wires |       |                    |



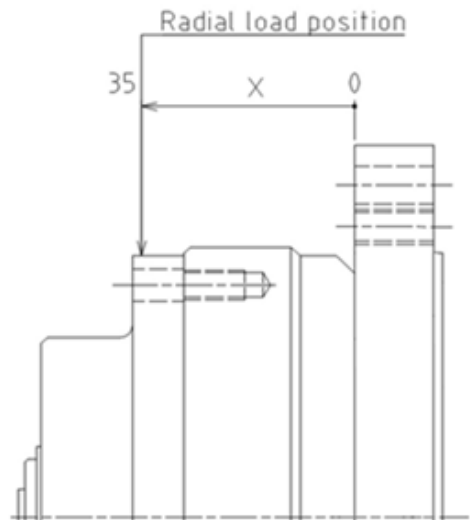
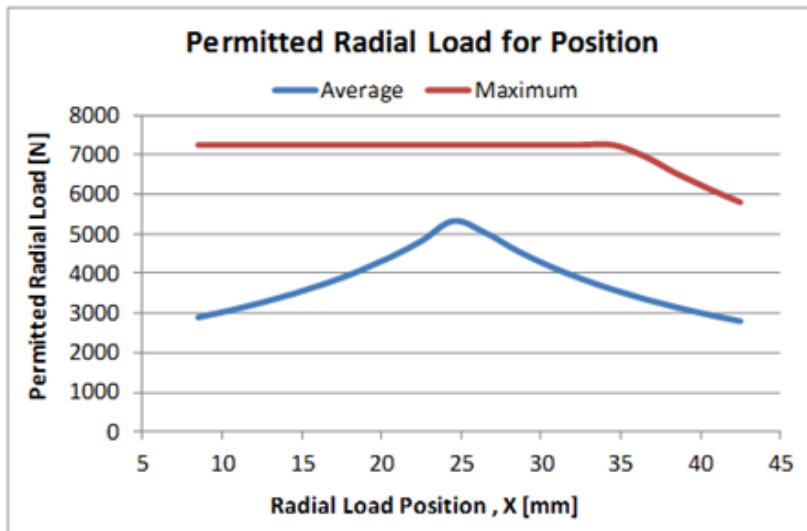
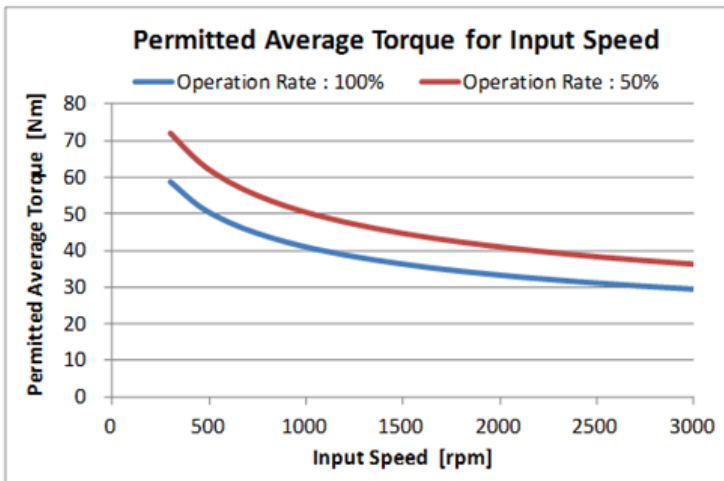
Enquiry N°: 880

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**SERVO MOTOR 089LDA30X**

**Gear Box characteristics**

|                               |      |                                             |      |
|-------------------------------|------|---------------------------------------------|------|
| Ratio                         | 9    | Backlash (arc/min)                          | ≤7   |
| Stages                        | 1    | Radial Load (Fr, N) @ Fa=0, Input Speed Nom | 3500 |
| Inertia (kg.cm <sup>2</sup> ) | ~0.2 | Radial Load MAX (Fr, N)                     | 7250 |
| Weight (kg)                   | 2.7  | Axial Load (Fa, N) @ Fr=0, Input Speed Nom  | 2200 |
| Efficiency                    | 95%  |                                             |      |

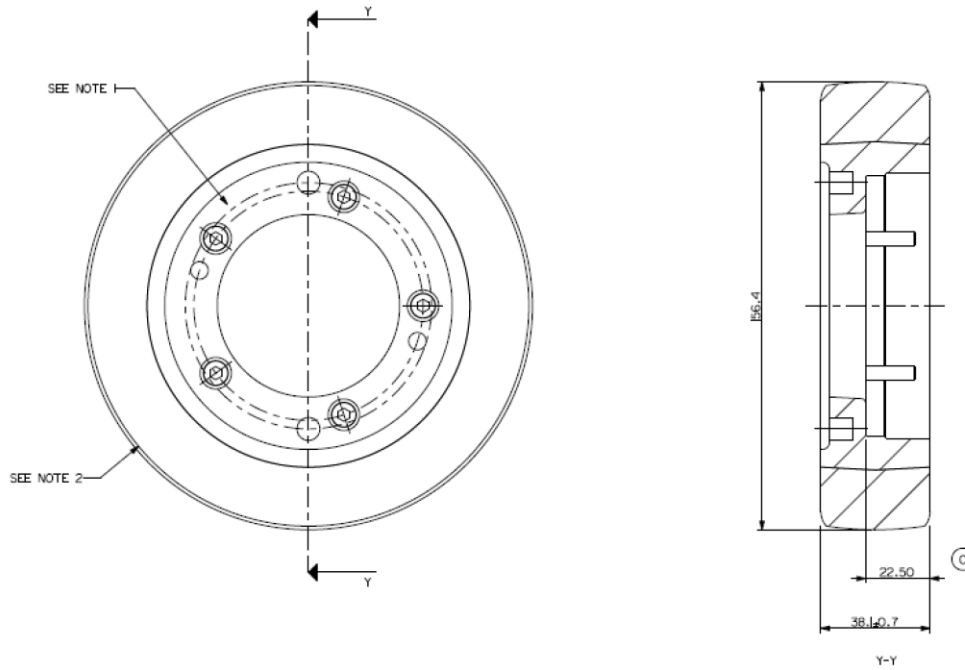


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### SERVO MOTOR 089LDA30X

#### Wheel Specification



- NOTES:
1. CORE INFORMATION
    - MATERIAL: HT200 CAST IRON.
    - FINISH: PAINT BLACK.
  2. TYRE INFORMATION
    - MATERIAL: POLYESTER BASED POLYURETHANE THERMOSET CASTABLE
  3. M5 x 15 CAP HEX B2P MOUNTING BOLTS (x4)



### SERVO MOTOR 089LDA150

## 1000KG PAYLOAD AGV SOLUTION



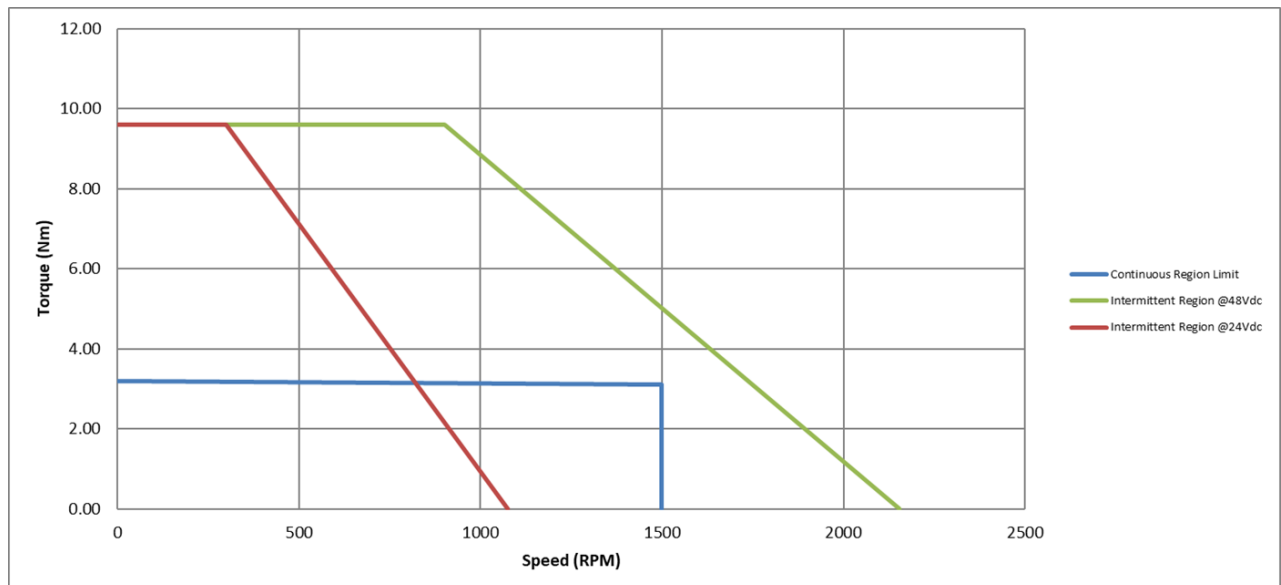
#### Definition

| Type                 | Unimotor HD      |                                                  |
|----------------------|------------------|--------------------------------------------------|
| Frame Size (mm)      | <b>089</b>       |                                                  |
| Voltage              | <b>L</b>         | 40-50V DC                                        |
| Magnet type          | <b>D</b>         | D - High dynamic                                 |
| Frame Length         | <b>A</b>         |                                                  |
| Speed (min-1)        | <b>15</b>        | 1500 @ 48V – 750rpm @ 24V                        |
| Brake                | <b>0</b>         | Unbraked                                         |
| Connection type      | <b>F</b>         | Integrated Flying Cable                          |
| Output shaft         | <b>G</b>         | Integrated Gearbox Shaft                         |
| Feedback device code | <b>CJ</b>        | CJ – Renco R35i encoder 4096 5PP push-pull comms |
| Inertia & thermistor | <b>H</b>         | H – high inertia + no thermistor                 |
| PCD (Gbox)           | <b>100</b>       | 100 (Gear box)                                   |
| Shaft Diameter       | <b>620</b>       | G BOX output                                     |
|                      | -                |                                                  |
| Insulation class     | <b>F</b>         |                                                  |
| UL Motor / UL Stator | <b>UL Stator</b> |                                                  |

#### Nominal characteristics

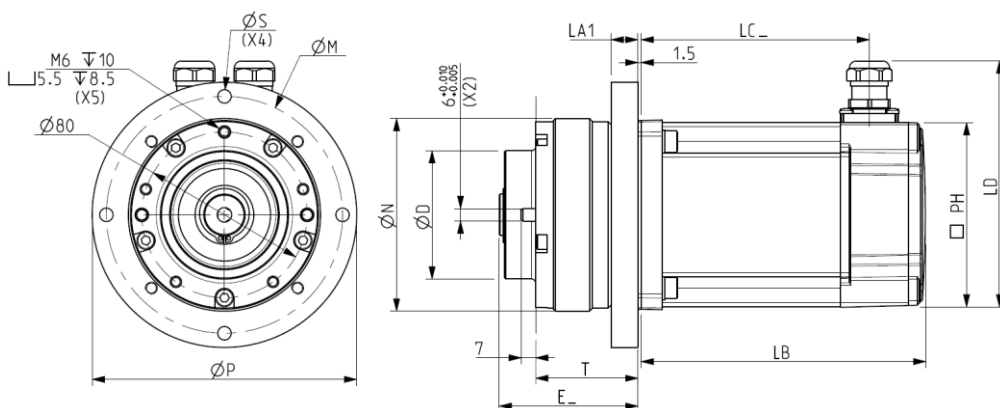
|                                            |               |                                        |                 |
|--------------------------------------------|---------------|----------------------------------------|-----------------|
| Motor Ambient Temperature (°C)             | 0 to 40       | Motor Ambient Storage Temperature (°C) | -15 to 40       |
| Motor Peak Torque (Nm)                     | 9.6           |                                        |                 |
| Motor Stall Torque (Nm)                    | 3.2           | Stall Current                          | 13.0            |
| Rated Torque (Nm)                          | 3             | Rated Current (A)                      | 12.7            |
| Rated Power (kW) @ 48V                     | 0.5           | Rated Power (kW) @ 24V                 | 0.25            |
| Winding Thermal Time Constant (s)          | 93            | Kt (Nm/A)                              | 0.24            |
| Number of Poles                            | 10            | Ke (V/kmin-1)                          | 15.17           |
| Maximum Cogging (Nm)                       | 0.1           | R (ph-ph) (Ohm)                        | 0.26            |
| Inertia Motor + GBox (kg.cm <sup>2</sup> ) | 6.5           | L (ph-ph) (mH)                         | 1.64            |
| Ingress Protection Level (IP)              | 40            | Weight (kg) Motor + gearbox            | 6.5             |
| Intermittent Torque (Nm)                   | 4.8 (S3 Duty) |                                        |                 |
| Intermittent Power (kW)                    | 0.7 (S3 Duty) | Intermittent Current (A)               | 20.25 (S3 Duty) |

#### Torque / speed graph



### SERVO MOTOR 089LDA150

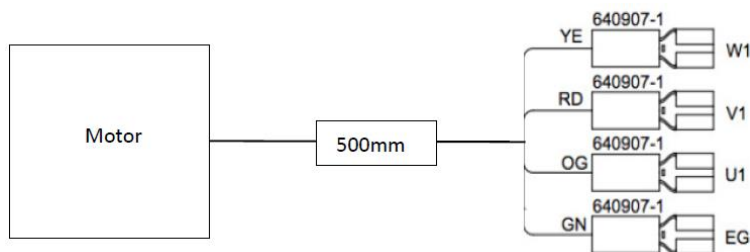
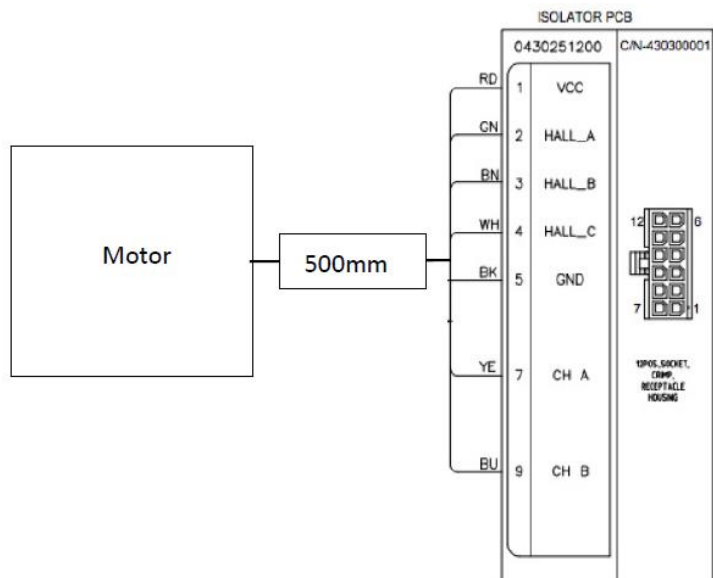
#### Motors (° & mm)



|     |                          |           |
|-----|--------------------------|-----------|
| LB  | Motor Total length       | 137.8     |
| LC  | Power connector position | 110.0     |
| LA1 | Flange thickness         | 13        |
| T   | Register Length          | 49.5      |
| N   | Register Diameter        | 93 h7     |
| LD  | Connector overall height | ~118.0    |
| P   | Flange Dia GBox          | 128       |
| S   | Fixing Hole Diameter     | 6.5       |
| M   | Fixing hole PCD          | 114.3     |
| PH  | Motor Housing Width      | 89        |
| E   | GBox Length              | 67.2      |
| D   | GBox Clearance Dia       | 62.7±0.07 |
|     | Motor+Gbox Total Length  | 206.5     |

#### Motor electrical interface Flying leads option:

| Feedback device code:                                                                                   |       |        |    |        |      | Connection type:                                                                                                                                                         |       |                    |
|---------------------------------------------------------------------------------------------------------|-------|--------|----|--------|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|--------------------|
| <b>CJ – Renco R35i encoder 4096 5PP push-pull comms</b>                                                 |       |        |    |        |      |                                                                                                                                                                          |       |                    |
| 1                                                                                                       | Red   | Power  | 7  | Yellow | CH A | 1                                                                                                                                                                        | U     | Red (x 1)          |
| 2                                                                                                       | Green | HALL A | 8  |        | -    | 2                                                                                                                                                                        | V     | Orange (x 1)       |
| 3                                                                                                       | Brown | HALL B | 9  | Blue   | CH B | 3                                                                                                                                                                        | W     | Yellow (x 1)       |
| 4                                                                                                       | White | HALL C | 10 |        |      | 4                                                                                                                                                                        | Earth | Green/Yellow (x 1) |
| 5                                                                                                       | Black | GND    | 11 |        |      |                                                                                                                                                                          |       |                    |
| 6                                                                                                       | Red   |        | 12 |        |      |                                                                                                                                                                          |       |                    |
| <b>SIG Cable (28 AWG): 500mm<br/>(from gland to customer end)<br/>12-Way MOLEX Connector 43025-1200</b> |       |        |    |        |      | <b>PWR Cable: 500mm<br/>(from gland to customer end)<br/>4 cores of 16 AWG UL 1330 wire, with polyolefin heat shrink sleeve<br/>Spade terminals fitted to lead wires</b> |       |                    |



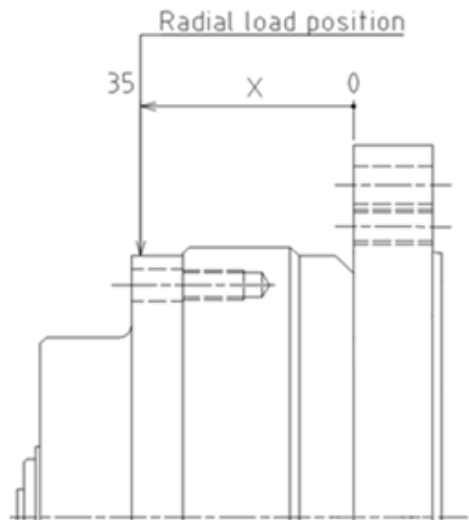
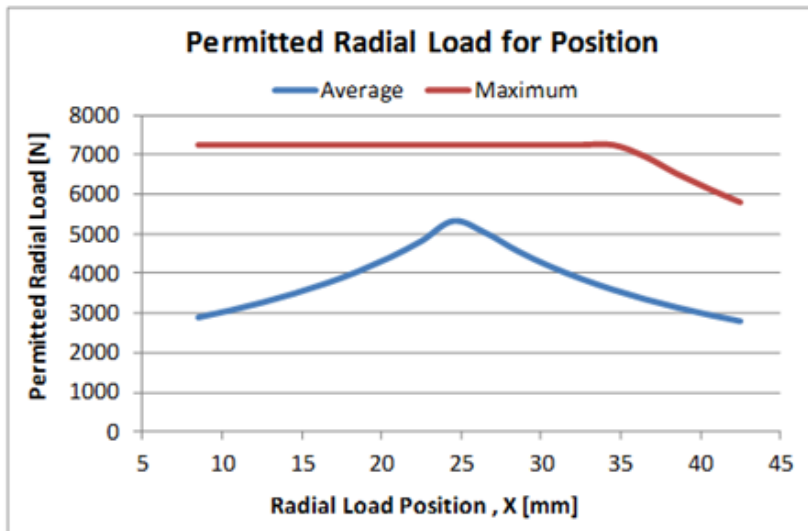
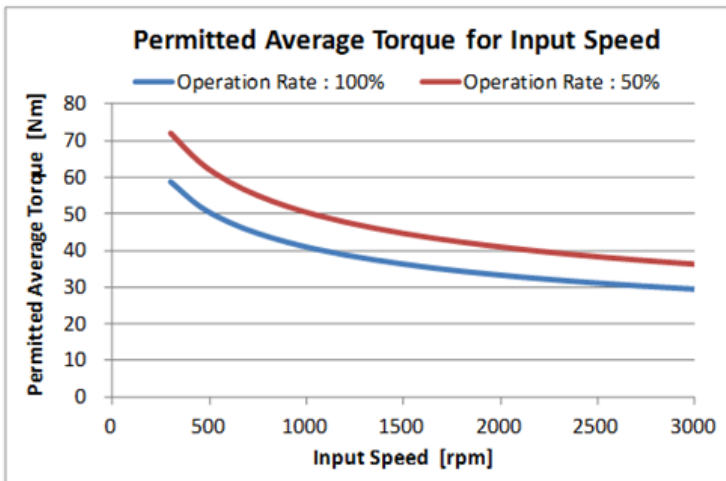
Enquiry N°: 880

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**SERVO MOTOR 089LDA150**

**Gear Box characteristics**

|                               |      |                                             |      |
|-------------------------------|------|---------------------------------------------|------|
| Ratio                         | 9    | Backlash (arc/min)                          | ≤7   |
| Stages                        | 1    | Radial Load (Fr, N) @ Fa=0, Input Speed Nom | 3500 |
| Inertia (kg.cm <sup>2</sup> ) | ~0.2 | Radial Load MAX (Fr, N)                     | 7250 |
| Weight (kg)                   | 2.7  | Axial Load (Fa, N) @ Fr=0, Input Speed Nom  | 2200 |
| Efficiency                    | 95%  |                                             |      |

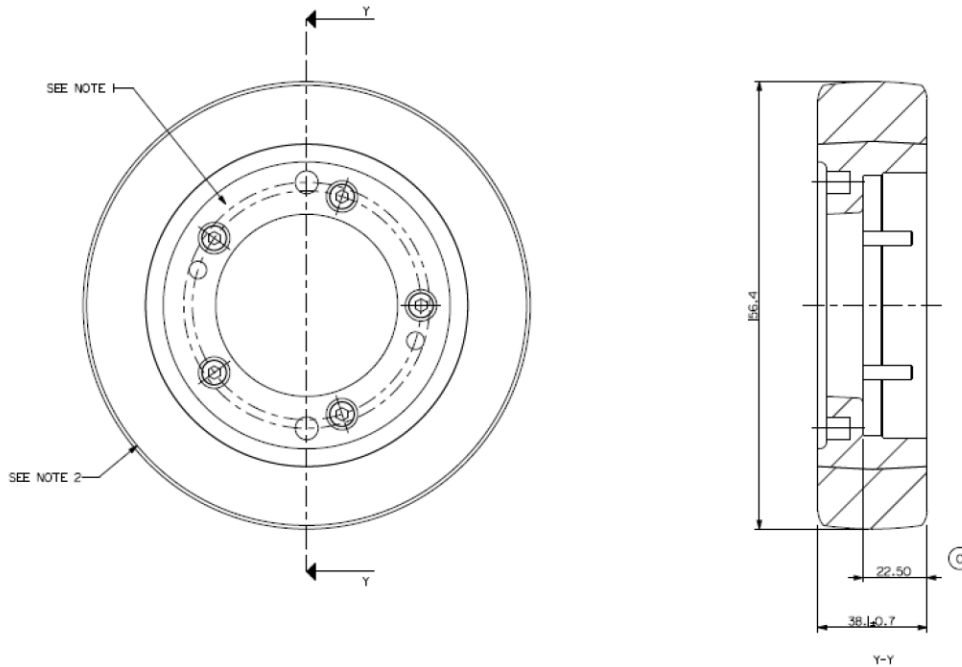


Enquiry N°: 880

Created by: DB / Checked by: PP

### SERVO MOTOR 089LDA150

#### Wheel Specification



- NOTES:
- CORE INFORMATION
    - MATERIAL: HT200 CAST IRON.
    - FINISH: PAINT BLACK.
  - TYRE INFORMATION
    - MATERIAL: POLYESTER BASED POLYURETHANE THERMOSET CASTABLE
  - M5 x 15 CAP HEX BZP MOUNTING BOLTS (X5)

### SERVO MOTOR 089LDA300

## 1000KG PAYLOAD AGV SOLUTION



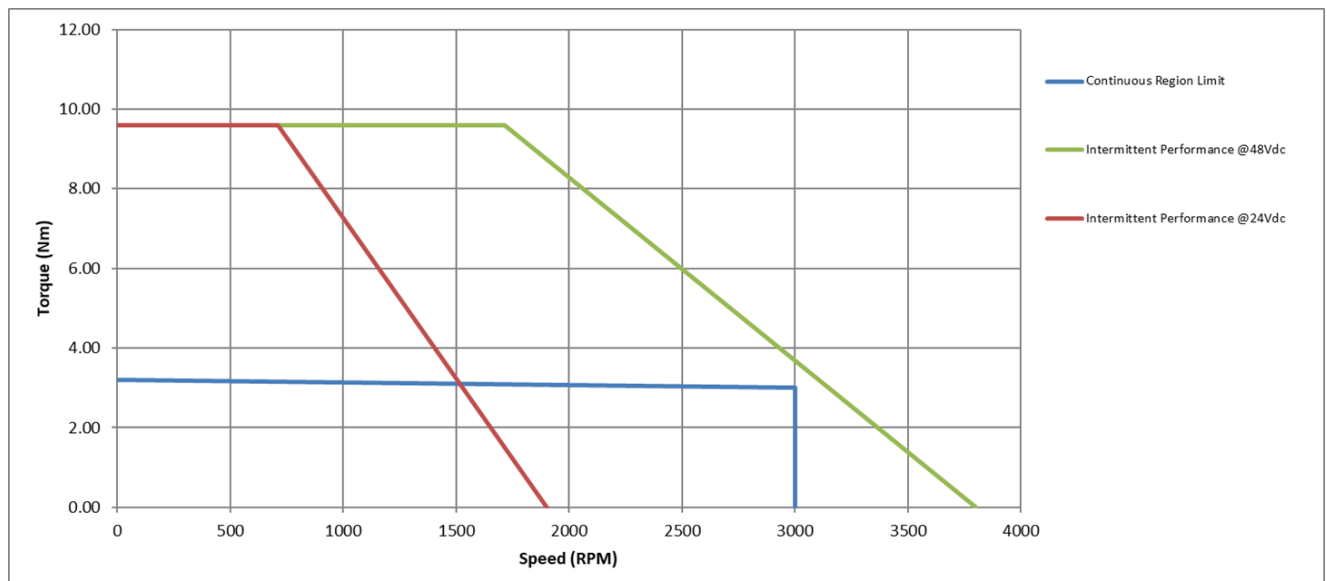
#### Definition

| Type                 | Unimotor HD      |                                                  |
|----------------------|------------------|--------------------------------------------------|
| Frame Size (mm)      | <b>089</b>       |                                                  |
| Voltage              | <b>L</b>         | 40-50V DC                                        |
| Magnet type          | <b>D</b>         | D - High dynamic                                 |
| Frame Length         | <b>A</b>         |                                                  |
| Speed (min-1)        | <b>30</b>        | 3000 @ 48V - 1500 @ 24V                          |
| Brake                | <b>0</b>         | Unbraked                                         |
| Connection type      | <b>F</b>         | Integrated Flying Cable                          |
| Output shaft         | <b>G</b>         | Integrated Gearbox Shaft                         |
| Feedback device code | <b>CJ</b>        | CJ – Renco R35i encoder 4096 5PP push-pull comms |
| Inertia & thermistor | <b>H</b>         | H – high inertia + no thermistor                 |
| PCD (Gbox)           | <b>100</b>       | 100 (Gear box)                                   |
| Shaft Diameter       | <b>620</b>       | G BOX output                                     |
|                      | -                |                                                  |
| Insulation class     | <b>F</b>         |                                                  |
| UL Motor / UL Stator | <b>UL Stator</b> |                                                  |

#### Nominal characteristics

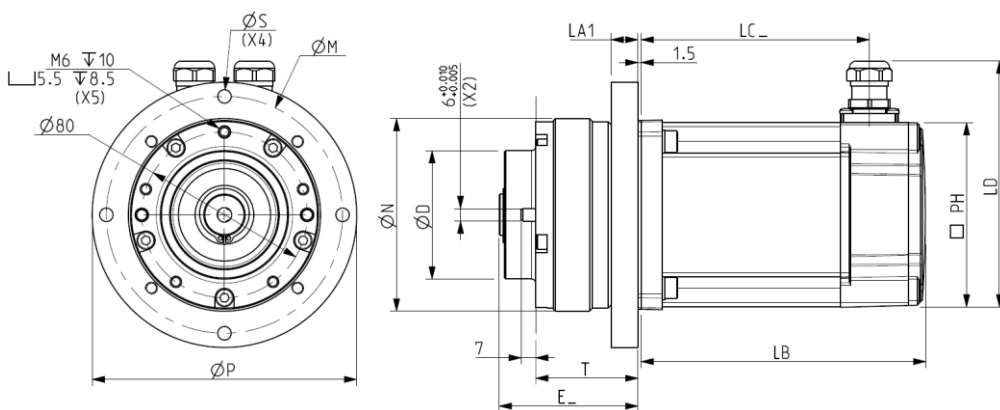
|                                            |               |                                        |                 |
|--------------------------------------------|---------------|----------------------------------------|-----------------|
| Motor Ambient Temperature (°C)             | 0 to 40       | Motor Ambient Storage Temperature (°C) | -15 to 40       |
| Motor Peak Torque (Nm)                     | 9.6           |                                        |                 |
| Motor Stall Torque (Nm)                    | 3.2           | Stall Current                          | 23.0            |
| Rated Torque (Nm)                          | 3             | Rated Current (A)                      | 21.6            |
| Rated Power (kW) @ 48V                     | 0.94          | Rated Power (kW) @ 24V                 | 0.47            |
| Winding Thermal Time Constant (s)          | 93            | Kt (Nm/A)                              | 0.14            |
| Number of Poles                            | 10            | Ke (V/kmin-1)                          | 8.5             |
| Maximum Cogging (Nm)                       | 0.1           | R (ph-ph) (Ohm)                        | 0.08            |
| Inertia Motor + GBox (kg.cm <sup>2</sup> ) | 6.5           | L (ph-ph) (mH)                         | 0.43            |
| Ingress Protection Level (IP)              | 40            | Weight (kg) Motor + gearbox            | 6.5             |
| Intermittent Torque (Nm)                   | 4.8 (S3 Duty) |                                        |                 |
| Intermittent Power (kW)                    | 0.7 (S3 Duty) | Intermittent Current (A)               | 34.29 (S3 Duty) |

#### Torque / speed graph



**SERVO MOTOR 089LDA300**

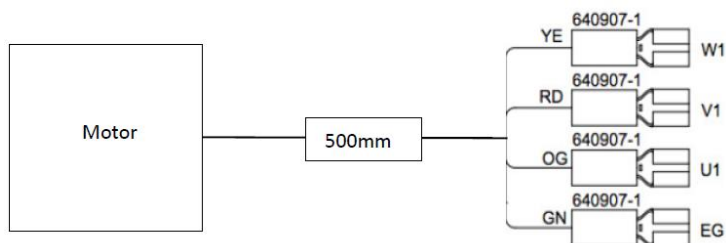
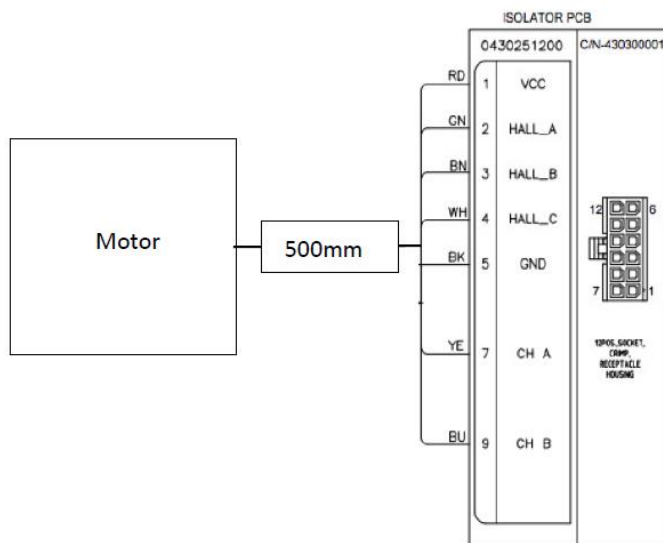
Motors (° & mm)



|     |                          |           |
|-----|--------------------------|-----------|
| LB  | Motor Total length       | 137.8     |
| LC  | Power connector position | 110.0     |
| LA1 | Flange thickness         | 13        |
| T   | Register Length          | 49.5      |
| N   | Register Diameter        | 93 h7     |
| LD  | Connector overall height | ~118.0    |
| P   | Flange Dia GBox          | 128       |
| S   | Fixing Hole Diameter     | 6.5       |
| M   | Fixing hole PCD          | 114.3     |
| PH  | Motor Housing Width      | 89        |
| E   | GBox Length              | 67.2      |
| D   | GBox Clearance Dia       | 62.7±0.07 |
|     | Motor+Gbox Total Length  | 206.5     |

**Motor electrical interface Flying leads option:**

| Feedback device code:                                                                                 |       |        |    |        |      | Connection type:                                                                                                                                                      |       |                    |
|-------------------------------------------------------------------------------------------------------|-------|--------|----|--------|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|--------------------|
| <b>CJ – Renco R35i encoder 4096 5PP push-pull comms</b>                                               |       |        |    |        |      |                                                                                                                                                                       |       |                    |
| 1                                                                                                     | Red   | Power  | 7  | Yellow | CH A | 1                                                                                                                                                                     | U     | Red (x 1)          |
| 2                                                                                                     | Green | HALL A | 8  |        | -    | 2                                                                                                                                                                     | V     | Orange (x 1)       |
| 3                                                                                                     | Brown | HALL B | 9  | Blue   | CH B | 3                                                                                                                                                                     | W     | Yellow (x 1)       |
| 4                                                                                                     | White | HALL C | 10 |        |      | 4                                                                                                                                                                     | Earth | Green/Yellow (x 1) |
| 5                                                                                                     | Black | GND    | 11 |        |      |                                                                                                                                                                       |       |                    |
| 6                                                                                                     | Red   |        | 12 |        |      |                                                                                                                                                                       |       |                    |
| <b>SIG Cable (28 AWG): 500mm</b><br>(from gland to customer end)<br>12-Way MOLEX Connector 43025-1200 |       |        |    |        |      | <b>PWR Cable: 500mm</b><br>(from gland to customer end)<br>4 cores of 16 AWG UL 1330 wire, with polyolefin heat shrink sleeve<br>Spade terminals fitted to lead wires |       |                    |



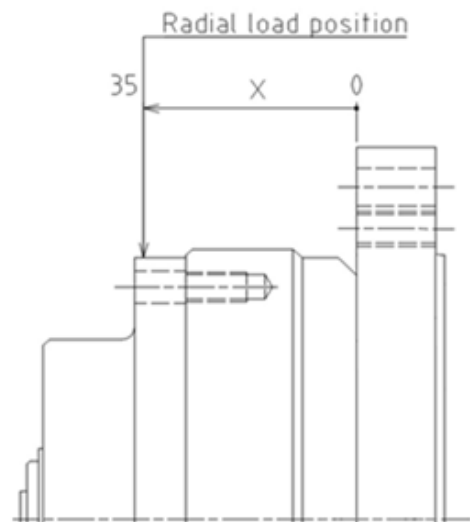
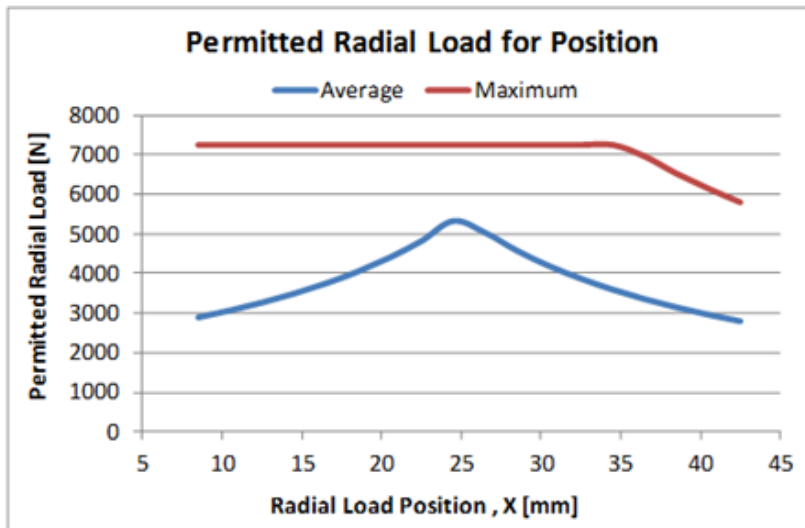
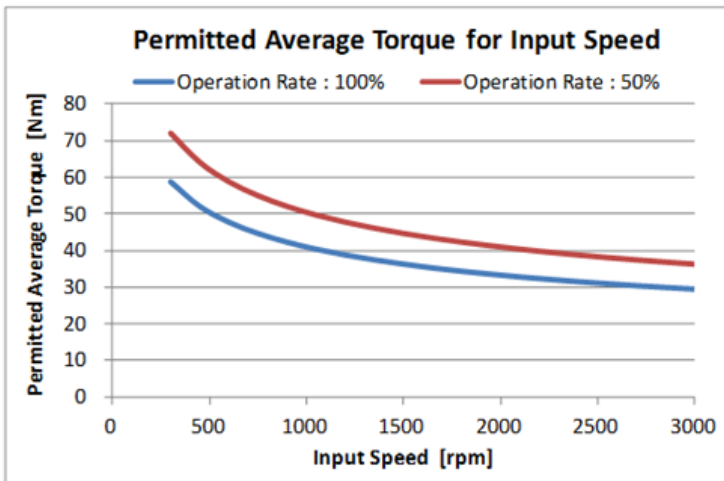
Enquiry N°: 880

Created by: DB / Checked by: PP

**SERVO MOTOR 089LDA300**

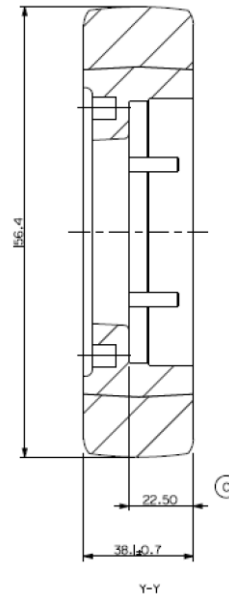
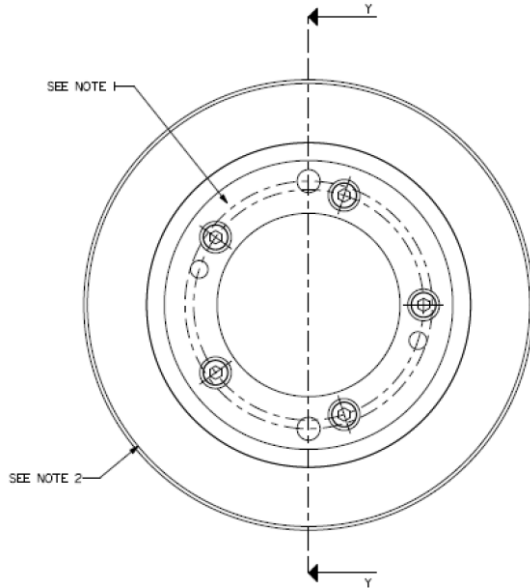
**Gear Box characteristics**

|                               |      |                                             |      |
|-------------------------------|------|---------------------------------------------|------|
| Ratio                         | 9    | Backlash (arc/min)                          | ≤7   |
| Stages                        | 1    | Radial Load (Fr, N) @ Fa=0, Input Speed Nom | 3500 |
| Inertia (kg.cm <sup>2</sup> ) | ~0.2 | Radial Load MAX (Fr, N)                     | 7250 |
| Weight (kg)                   | 2.7  | Axial Load (Fa, N) @ Fr=0, Input Speed Nom  | 2200 |
| Efficiency                    | 95%  |                                             |      |



### SERVO MOTOR 089LDA300

#### Wheel Specification



- NOTES:
- CORE INFORMATION
    - MATERIAL: HT200 CAST IRON.
    - FINISH: PAINT BLACK.
  - TYRE INFORMATION
    - MATERIAL: POLYESTER BASED POLYURETHANE THERMOSET CASTABLE
  - M5 x 15 CAP HEX B2P MOUNTING BOLTS (X8)