

# Product data sheet

## TSA 160 NT F



Electro-hydraulic door drive for 1-leaf fire and smoke protection doors

### AREAS OF APPLICATION

- Fire and smoke protection doors
- Right and left single leaf single-action doors
- Single-action doors up to 1400 mm leaf width or 250 kg weight
- Interior and exterior doors with high access frequency
- Transom installation opposite hinge side with link arm



### PRODUCT FEATURES

- Closing force with variable adjustment EN3-6
- Opening and closing speed can be individually adjusted
- Hydraulic latching action which accelerates the door shortly before the closed position
- Mechanical and electrical closing sequence control holds the active leaf in the waiting position until the passive leaf is closed
- Vestibule function controls the opening and closing of two consecutive doors (interlocking door system)
- Integrated back check, slows down doors that are thrown open forcefully
- Automatic reversing detects an obstacle and returns to the opening position
- Push & Go function triggers the automatic drive components following light manual pressure on the door leaf
- Drive can be used with link arm

### TECHNICAL DATA

|                                                        |                                                                                      |
|--------------------------------------------------------|--------------------------------------------------------------------------------------|
| Productname                                            | TSA 160 NT F                                                                         |
| Reveal depth (max.)                                    | 400 mm                                                                               |
| Door overlap (max.)                                    | 20 mm                                                                                |
| Drive type                                             | Electrohydraulic                                                                     |
| Opening angle (max.)                                   | 115 °                                                                                |
| DIN left                                               | Yes                                                                                  |
| DIN right                                              | Yes                                                                                  |
| Transom installation opposite hinge side with link arm | Yes                                                                                  |
| Mechanical latching action                             | Yes                                                                                  |
| IP rating                                              | IP20                                                                                 |
| Modes of operation                                     | Automatic, Off, Permanently open, Shop closing, Night                                |
| Automatic function                                     | Yes                                                                                  |
| Obstacle detection                                     | Yes                                                                                  |
| Push & Go                                              | adjustable                                                                           |
| Operation                                              | Programme switch DPS, Programme switch integrated in the drive, Programme switch MPS |
| Suitability for fire protection doors                  | Yes                                                                                  |

# TSA 160 NT F



## PART

### TSA 160 NT F

Electro-hydraulic door drive for 1-leaf fire and smoke protection doors

| Name                            | Description                                                                      | Ident-No. | Dimensions         | Operating voltage | Leaf width (min.) |
|---------------------------------|----------------------------------------------------------------------------------|-----------|--------------------|-------------------|-------------------|
| TSA 160 NT F GST 0-100 MONT.PL. | Electrohydraulic swing door drive for single and double leaf single-action doors | 120546    | 690 x 100 x 121 mm | 230 V             | 690 mm            |

### LINK ARM TSA 160 NT

For transom installation on opposite hinge side for reveal depths of 0 - 400 mm

| Name                           | Description                   | Ident-No. | Colour          |
|--------------------------------|-------------------------------|-----------|-----------------|
| Link arm TSA 160 NT            | for reveal depth 200 - 300 mm | 144405    | silver-coloured |
| Link arm TSA 160 NT            | for reveal depth 0-100 mm     | 144397    | silver-coloured |
| Link arm TSA 160 NT            | for reveal depth 100-200 mm   | 144403    | acc. to RAL     |
| Link arm TSA 160 NT reinforced | for reveal depth 100-200 mm   | 144417    | acc. to RAL     |
| Link arm TSA 160 NT            | for reveal depth 300 - 400 mm | 144409    | silver-coloured |
| Link arm TSA 160 NT            | for reveal depth 300 - 400 mm | 144411    | acc. to RAL     |
| Link arm TSA 160 NT            | for reveal depth 100-200 mm   | 144401    | silver-coloured |
| Link arm TSA 160 NT            | for reveal depth 0-100 mm     | 144399    | acc. to RAL     |
| Link arm TSA 160 NT reinforced | for reveal depth 100-200 mm   | 144416    | silver-coloured |
| Link arm TSA 160 NT reinforced | for reveal depth 200 - 300 mm | 144419    | silver-coloured |
| Link arm TSA 160 NT reinforced | for reveal depth 0-100 mm     | 144414    | acc. to RAL     |
| Link arm TSA 160 NT reinforced | for reveal depth 300 - 400 mm | 144423    | acc. to RAL     |
| Link arm TSA 160 NT reinforced | for reveal depth 300 - 400 mm | 144422    | silver-coloured |
| Link arm TSA 160 NT reinforced | for reveal depth 0-100 mm     | 144413    | silver-coloured |
| Link arm TSA 160 NT            | for reveal depth 200 - 300 mm | 144407    | acc. to RAL     |
| Link arm TSA 160 NT reinforced | for reveal depth 200 - 300 mm | 144420    | acc. to RAL     |

# TSA 160 NT F



## COVER 160 NT

For the TSA 160 NT swing door drive



| Name             | Description                | Ident-No. | Colour      | Length |
|------------------|----------------------------|-----------|-------------|--------|
| Cover TSA 160 NT | Cover drive, length 673 mm | 069711    | acc. to RAL |        |
| Cover TSA 160 NT | Cover drive, length 673 mm | 030057    | EV1         | 673 mm |

## COVER EXTENSION KIT TSA 160 NT

For the TSA 160 NT swing door drive, including mounting plates and installation material



| Name                                  | Description                                                                                                                          | Ident-No. |
|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|-----------|
| Intermediate cover kit for TSA 160 NT | comprising: intermediate cover extension kit TSA 160 NT, mounting plate TSA 160 for intermediate cover extension kit and accessories | 120121    |

## GC GR FOR GC 338

Sensor roller guide rail TSA 160 NT for GC 338 sensor strip



| Name                          | Description                                                   | Ident-No. | Colour      | Length  |
|-------------------------------|---------------------------------------------------------------|-----------|-------------|---------|
| GC GR for GC 338 TSA 160 NT   | for TSA 160 NT, with deeper guide, incl. lever and end caps   | 146217    | EV1         | 1200 mm |
| GC GR for GC 338 TSA 160 NT Z | for TSA 160 NT Z, with deeper guide, incl. lever and end caps | 146211    | EV1         | 1200 mm |
| GC GR for GC 338 TSA 160 NT   | for TSA 160 NT, with deeper guide, incl. lever and end caps   | 146222    | acc. to RAL | 1500 mm |
| GC GR for GC 338 TSA 160 NT   | for TSA 160 NT, with deeper guide, incl. lever and end caps   | 146221    | acc. to RAL | 1200 mm |
| GC GR for GC 338 TSA 160 NT Z | for TSA 160 NT Z, with deeper guide, incl. lever and end caps | 146216    | acc. to RAL | 1500 mm |
| GC GR for GC 338 TSA 160 NT   | for TSA 160 NT, with deeper guide, incl. lever and end caps   | 146218    | EV1         | 1500 mm |
| GC GR for GC 338 TSA 160 NT Z | for TSA 160 NT Z, with deeper guide, incl. lever and end caps | 146212    | EV1         | 1500 mm |
| GC GR for GC 338 TSA 160 NT Z | for TSA 160 NT Z, with deeper guide, incl. lever and end caps | 146215    | acc. to RAL | 1200 mm |

**MOUNTING PLATE TSA 160**

| Name                      | Description | Ident-No. | Colour          |
|---------------------------|-------------|-----------|-----------------|
| Mounting plate TSA 160 NT |             | 064615    | silver-coloured |
| Mounting plate TSA 160 NT |             | 069481    | acc. to RAL     |

**ACCESSORY****SPINDLE EXTENSION TSA 160 NT**

Available lengths 24 mm, 30 mm and 45 mm



| Name                         | Description | Ident-No. | Colour          | Length |
|------------------------------|-------------|-----------|-----------------|--------|
| Spindle extension TSA 160 NT | V = 45 mm   | 069499    | white RAL 9016  | 45 mm  |
| Spindle extension TSA 160 NT | V = 30 mm   | 057664    | dark bronze     | 24 mm  |
| Spindle extension TSA 160 NT | V = 30 mm   | 056420    | silver-coloured | 30 mm  |
| Spindle extension TSA 160 NT | V = 24 mm   | 067599    | dark bronze     | 24 mm  |
| Spindle extension TSA 160 NT | V = 45 mm   | 059989    | dark bronze     | 45 mm  |
| Spindle extension TSA 160 NT | V = 45 mm   | 069500    | acc. to RAL     | 45 mm  |
| Spindle extension TSA 160 NT | V = 24 mm   | 069494    | acc. to RAL     | 24 mm  |
| Spindle extension TSA 160 NT | V = 45 mm   | 059988    | silver-coloured | 45 mm  |
| Spindle extension TSA 160 NT | V = 30 mm   | 069498    | acc. to RAL     | 30 mm  |
| Spindle extension TSA 160 NT | V = 24 mm   | 069493    | white RAL 9016  | 24 mm  |
| Spindle extension TSA 160 NT | V = 24 mm   | 067598    | silver-coloured | 24 mm  |
| Spindle extension TSA 160 NT | V = 30 mm   | 069497    | white RAL 9016  | 30 mm  |

**LINK ARM TSA 160 NT**

For transom installation on opposite hinge side for reveal depths of 0 - 400 mm

| Name                           | Description                   | Ident-No. | Colour          |
|--------------------------------|-------------------------------|-----------|-----------------|
| Link arm TSA 160 NT            | for reveal depth 200 - 300 mm | 144405    | silver-coloured |
| Link arm TSA 160 NT            | for reveal depth 0-100 mm     | 144397    | silver-coloured |
| Link arm TSA 160 NT            | for reveal depth 100-200 mm   | 144403    | acc. to RAL     |
| Link arm TSA 160 NT reinforced | for reveal depth 100-200 mm   | 144417    | acc. to RAL     |
| Link arm TSA 160 NT            | for reveal depth 300 - 400 mm | 144409    | silver-coloured |
| Link arm TSA 160 NT            | for reveal depth 300 - 400 mm | 144411    | acc. to RAL     |
| Link arm TSA 160 NT            | for reveal depth 100-200 mm   | 144401    | silver-coloured |
| Link arm TSA 160 NT            | for reveal depth 0-100 mm     | 144399    | acc. to RAL     |
| Link arm TSA 160 NT reinforced | for reveal depth 100-200 mm   | 144416    | silver-coloured |
| Link arm TSA 160 NT reinforced | for reveal depth 200 - 300 mm | 144419    | silver-coloured |
| Link arm TSA 160 NT reinforced | for reveal depth 0-100 mm     | 144414    | acc. to RAL     |
| Link arm TSA 160 NT reinforced | for reveal depth 300 - 400 mm | 144423    | acc. to RAL     |
| Link arm TSA 160 NT reinforced | for reveal depth 300 - 400 mm | 144422    | silver-coloured |
| Link arm TSA 160 NT reinforced | for reveal depth 0-100 mm     | 144413    | silver-coloured |
| Link arm TSA 160 NT            | for reveal depth 200 - 300 mm | 144407    | acc. to RAL     |
| Link arm TSA 160 NT reinforced | for reveal depth 200 - 300 mm | 144420    | acc. to RAL     |

**ADAPTOR FOR SENSOR LINK ARM**

For mounting the link arm at the same height as the sensor strip



| Name                        | Description                               | Ident-No. | Colour          |
|-----------------------------|-------------------------------------------|-----------|-----------------|
| Adaptor for sensor link arm | For Powerturn, EMD / EMD-F and TSA 160 NT | 144352    | silver-coloured |
| Adaptor for sensor link arm | For Powerturn, EMD / EMD-F and TSA 160 NT | 153126    | acc. to RAL     |

# TSA 160 NT F



## ELBOW SWITCH

Plastic elbow switch, IP rating IP30, for activation of automatic doors



| Name                      | Description                      | Ident-No. | Colour                | Dimensions       | Type of installation         |
|---------------------------|----------------------------------|-----------|-----------------------|------------------|------------------------------|
| GEZE plastic elbow switch | Very flat design, IP rating IP30 | 114077    | stainless steel optic | 90 x 180 x 23 mm | Surface-mounted installation |
| GEZE plastic elbow switch | Very flat design, IP rating IP30 | 114078    | white                 | 90 x 180 x 23 mm | Surface-mounted installation |

## LS990 ELBOW SWITCH

Elbow switch for activating automatic doors



| Name                | Description            | Ident-No. | Colour          | Dimensions       | Type of installation         |
|---------------------|------------------------|-----------|-----------------|------------------|------------------------------|
| LS 990 elbow switch | IP rating IP30 H=223mm | 128583    | Stainless steel | 81 x 223 x 18 mm | Flush-mounted installation   |
| LS 990 elbow switch | IP rating IP30 H=223mm | 128582    | Stainless steel | 81 x 223 x 51 mm | Surface-mounted installation |
| LS 990 elbow switch | IP rating IP30 H=223mm | 141041    | alpine white    | 81 x 223 x 51 mm | Surface-mounted installation |
| LS 990 elbow switch | IP rating IP30 H=223mm | 141042    | alpine white    | 81 x 223 x 18 mm | Flush-mounted installation   |

## LED SENSOR SWITCH

Switch for activating automatic doors



| Name                    | Description                                                                                                                               | Ident-No. | Colour | Dimensions        | Length |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|-----------|--------|-------------------|--------|
| LED sensor switch       | Capacitive push button with blue LED lighting and haptic Braille lettering for activating automatic door systems. Protection rating IP69K | 137529    | black  | 100 x 100 x 10 mm | 100 mm |
| LED sensor switch glass | Capacitive push button with blue LED lighting for activating automatic door systems. Protection rating IP69K                              | 143412    | white  | 100 x 100 x 8 mm  | 100 mm |

### GC 304

Radarmovement detector with individual adjustment option for activating automatic doors



| Name                             | Description                            | Ident-No. | Colour | Dimensions       | Output           |
|----------------------------------|----------------------------------------|-----------|--------|------------------|------------------|
| GC 304 R Radar movement detector | Activation of all GEZE automatic doors | 130651    | black  | 120 x 80 x 50 mm | Electrical relay |

### GC 306

Non-contact proximity switch for activating automatic doors



| Name                         | Description                                  | Ident-No. | Colour       | Operating voltage | Length |
|------------------------------|----------------------------------------------|-----------|--------------|-------------------|--------|
| GC 306 (with hand pictogram) | Proximity switch to activate automatic doors | 163028    | alpine white | 24 V DC           | 84 mm  |
| GC 306 (with GEZE pictogram) | Proximity switch to activate automatic doors | 163029    | alpine white | 24 V DC           | 84 mm  |

### GC 338

Sensor strip with standby mode for the protection of automatic swing and revolving doors



| Name                                 | Description                                                                                                                                                 | Ident-No. | Colour      | Output                       | Operating voltage |
|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-------------|------------------------------|-------------------|
| GC 338 Pair of sensor strips 1200 mm | comprising two complete sensor strips for protection of the swivelling range of automatic swing and revolving doors in accordance with DIN 18650 / EN 16005 | 142825    | acc. to RAL | Electrical relay             | 24 V              |
| GC 338 Pair of sensor strips 1500 mm | comprising two complete sensor strips for protection of the swivelling range of automatic swing and revolving doors in accordance with DIN 18650 / EN 16005 | 142827    | acc. to RAL | Potential-free relay contact | 24 V              |
| GC 338 Pair of sensor strips 1500 mm | comprising two complete sensor strips for protection of the swivelling range of automatic swing and revolving doors in accordance with DIN 18650 / EN 16005 | 142757    | EV1         | Electrical relay             | 24 V              |
| GC 338 Pair of sensor strips 1200 mm | comprising two complete sensor strips for protection of the swivelling range of automatic swing and revolving doors in accordance with DIN 18650 / EN 16005 | 142219    | EV1         | Electrical relay             | 24 V              |



| Name                                 | Description                                                                                                                                                 | Ident-No. | Colour         | Output                       | Operating voltage |
|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|----------------|------------------------------|-------------------|
| GC 338 Pair of sensor strips 1200 mm | comprising two complete sensor strips for protection of the swivelling range of automatic swing and revolving doors in accordance with DIN 18650 / EN 16005 | 142826    | white RAL 9016 | Electrical relay             | 24 V              |
| GC 338 Pair of sensor strips 1500 mm | comprising two complete sensor strips for protection of the swivelling range of automatic swing and revolving doors in accordance with DIN 18650 / EN 16005 | 142828    | white RAL 9016 | Potential-free relay contact | 24 V              |

### GC 342

Laser scanner for the protection of automatic swing doors with integrated object and wall blanking



| Name                  | Description                                                                                                               | Ident-No. | Colour                | Dimensions       | Operating voltage |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------|-----------|-----------------------|------------------|-------------------|
| GC 342 (left module)  | consisting of sensor module, cable and accessories                                                                        | 167433    | white RAL 9016        | 143 x 86 x 40 mm | 24 V              |
| GC 342 (right module) | consisting of sensor module, cable and accessories                                                                        | 167435    | black                 | 143 x 86 x 40 mm | 24 V              |
| GC 342 (left module)  | consisting of sensor module, cable and accessories                                                                        | 167434    | stainless steel optic | 143 x 86 x 40 mm | 24 V              |
| GC 342 (left module)  | consisting of sensor module, cable and accessories                                                                        | 167432    | black                 | 143 x 86 x 40 mm | 24 V              |
| GC 342 Kit            | comprising two sensors for securing the swivelling range of automatic swing doors in accordance with DIN 18650 / EN 16005 | 167439    | white RAL 9016        | 143 x 86 x 40 mm | 24 V              |
| GC 342 (right module) | consisting of sensor module, cable and accessories                                                                        | 167437    | stainless steel optic | 143 x 86 x 40 mm | 24 V              |
| GC 342 Kit            | comprising two sensors for securing the swivelling range of automatic swing doors in accordance with DIN 18650 / EN 16005 | 167438    | black                 | 143 x 86 x 40 mm | 24 V              |
| GC 342 (right module) | consisting of sensor module, cable and accessories                                                                        | 167436    | white RAL 9016        | 143 x 86 x 40 mm | 24 V              |
| GC 342 Kit            | comprising two sensors for securing the swivelling range of automatic swing doors in accordance with DIN 18650 / EN 16005 | 167440    | stainless steel optic | 143 x 86 x 40 mm | 24 V              |



## INTEGRATED OPENING RESTRICTOR

For limiting the opening angle



| Name                          | Description                                                                                             | Ident-No. |
|-------------------------------|---------------------------------------------------------------------------------------------------------|-----------|
| Integrated opening restrictor | for sensor roller guide rail GC GR and roller guide rail with deep guide (TSA 160 NT and Slimdrive EMD) | 181495    |
| Integrated opening restrictor | which can be easily integrated into the roller guide rails of the TSA 160 NT and Slimdrive EMD          | 167272    |

## USB PROGRAMMABLE ADAPTER



| Name                     | Description                                                                                                                                                                                                                                                                                                                                                                   | Ident-No. |
|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| USB programmable adapter | Transfer of firmware from the PC to the control unit (DCU); 3m cable length / Drivers, the control-specific programming software and DCU firmware files can be downloaded via the customer portal (compulsory registration). / Firmware updates on GEZE drives may only be carried out by experts authorised by the manufacturer (GEZE) in accordance with DIN 18650/EN 16005 | 130829    |