Simply part of the solution.
The Festo ★ Core Product Range.
Ready for dispatch from the Festo factory in 24 hours
Held in stock in 13 service centres worldwide!

Stock items

[Diagram showing various stock items]

More than 2,200 products

Our recommendation: Look for the star!

www.festo.com/corerange
**DSN Round cylinders**
- Diameter: 8, 10, 12, 16, 20, 25 mm (ISO 6432)
- Stroke length: 1 ... 500 mm
- Force: 24 ... 295 N
- Double-acting
- Fixed/adjustable cushioning

**DSNU Round cylinders with self-adjusting cushioning PPS**
- Diameter: 8, 10, 12, 16, 20, 25 mm to ISO 6432; 32, 40, 50, 63 mm
- Stroke length: 1 ... 500 mm
- Force: 19 ... 1870 N
- Double-acting
- Position sensing
- Fixed/adjustable/self-adjusting cushioning

**ADN Compact cylinders to ISO 21287**
- Diameter: 12, 16, 20, 25, 32, 40, 50, 63, 80, 100, 125 mm
- Stroke length: 1 ... 500 mm
- Force: 51 ... 7363 N
- Double-acting
- Position sensing
- Fixed/self-adjusting cushioning

**ADN-S Compact cylinder**
- Diameter 6, 10 mm
- Stroke length 5, 10 mm
- Force 9.4 ... 47 N
- Double-acting
- Without cushioning

**DGST Mini slide**
- Size 6, 8, 10, 12, 16, 20, 25
- Stroke length 10 ... 200 mm
- Force 25 ... 589 N
- Position sensing
- Fixed/adjustable cushioning
- Recirculating ball bearing guide,
- ball bearing cage guide (for sizes 20, 25)

★ Generally ready for shipping ex works in 24 h
ADVC/AEVC Short-stroke cylinders
- Diameter: 4, 6, 10, 12, 16, 20, 25, 32, 40, 50, 63, 80, 100 mm
- Stroke length: 2.5 ... 25 mm
- Force: 4.9 ... 4712 N
- Double-acting, single-acting
- Position sensing
- Flexible cushioning
- Without thread, female thread, male thread

DSBC Standard cylinders to ISO 15552
- Diameter: 32, 40, 50, 63, 80, 100, 125 mm
- Stroke length: 1 ... 2800 mm
- Force: 483 ... 7363 N
- Double-acting
- Position sensing
- Fixed/adjustable/self-adjusting cushioning

DFM-GF/KF Guided drives
- Diameter: 12, 16, 20, 25, 32, 40, 50, 63, 80, 100 mm
- Stroke length: 10 ... 400 mm
- Force: 51 ... 4712 N
- Position sensing
- Fixed/adjustable cushioning
- Plain-bearing guide
- Recirculating ball bearing guide

Generally ready for shipping ex works in 24 h
DGSL Mini slides
• Diameter: 4, 6, 8, 10, 12, 16, 20, 25 mm
• Stroke length: 10 ... 200 mm
• Force: 17 ... 483 N
• Position sensing
• Fixed/adjustable cushioning
• Ball bearing cage guide

DRRD Semi-rotary drives
• Size: 8, 10, 12, 16, 20, 25, 32, 35, 40, 50, 63 mm
• Torque: 0.2 ... 112 Nm
• Swivel angle: 0 ... 180°
• Position sensing
• Cushioning: elastic (P), hydraulic shock absorbers
• Flanged shaft

DRVS Swivel modules
• Size: 6, 8, 12, 16, 25, 32, 40 mm
• Torque: 0.15 ... 20 Nm
• Swivel angle: 90, 180, 270°
• Position sensing
• Fixed elastic cushioning

Generally ready for shipping ex works in 24 h
NEBU Connecting cables
Electrical connection:
• Open cable end
• Socket M5
• Socket M8
• Socket M12
• Socket 7/8"

SME-8M Proximity sensors for T-slot
• Switching output:
  − N/O contact, 3-wire
  − N/O contact, 2-wire
  − N/C contact, 3-wire
• Voltage: 0 ... 250 V DC, 230 V AC
• Cable length: 0.3, 2.5, 5, 7.5, 0.2 ... 10 m
• Plug connection: M8, M12
• Via reed contact

SMT-8M-A Proximity sensors for T-slot
• Switching output:
  − PNP, N/O contact, 3-wire
  − PNP, N/C contact, 3-wire
  − NPN, N/O contact, 3-wire
  − N/O contact, 2-wire
  − PNP, NPN switchable
  − PNP, N/C contact, N/O contact, switchable
• Voltage: 5 ... 30 V DC
• Cable length: 0.1 ... 30 m
• Plug connection: M8, M12
• Contactless PNP, NPN

SME-10M Proximity sensors for C-slot
• Switching output:
  − N/O contact, 2-wire
  − N/O contact, 3-wire
• Voltage: 24 V DC
• Plug connection: M8, M12
• With reed contact

SMT-10M Proximity sensors for C-slot
• Switching output:
  − PNP, N/O contact, 3-wire
  − NPN, N/O contact, 3-wire
  − PNP, N/O contact, 2-wire
• Voltage: 24 V DC
• Plug connection: M8, M12
• Non-contacting PNP, NPN

★ Generally ready for shipping ex works in 24 h
SDE5 Piezo-resistive pressure sensors

Five pressure measuring ranges:
- -1 to 0 bar
- -1 to 1 bar
- 0 to 2 bar
- 0 to 6 bar
- 0 to 10 bar

SPAN Pressure sensor

- Compact design 30 x 30 mm
- High-contrast display with blue backlighting
- Pressure measuring range -1 to 16 bar
- Voltage 20 ... 30 V DC
- Switching output 2x PNP or 2x NPN selectable
- Electrical output 0.1 ... 10 V, 1 ... 5 V, 4 ... 20 mA
- Pneumatic connection G1/8, R1/8, NPT1/8, M5, push-in connector 4 mm
- Pressure switch
- Vacuum switch

SIEN Inductive proximity sensors, polyamide housing

Design:
- Round, dia. 4 mm
- Round, dia. 6.5 mm
- M5x 0.5
- M8x 1
- M12x 1
- M18x 1
- M30x 1.6

SRBS Position sensors

- For semi-rotary drives DRVS 6 ... 40 and DSM 8, 10, 12
- Switching outputs PNP, NPN and NO, NC
- freely programmable
- Electrical connection M8
- Sensing range 0 ... 270°

Generally ready for shipping ex works in 24 h
VUVG Directional control valves, for individual connection

- In-line valves, semi in-line valves, sub-base valves
- Connection: M3, M5, M7, G1/8, G1/4
- Push-in connector: 3, 4, 6, 8, 10 mm
- Flow rate: 90 ... 1380 l/min
- Voltage: 5, 12, 24 V DC
- Solenoid actuated, piloted

VUVG-...-S Directional control valves

- In-line valves/individual valves, semi in-line valves, sub-base valves
- Connection: M5, M7, G1/8
- Valve function: 5/2-way, 2x 3/2-way
- Flow rate: 150, 360, 660 l/min
- Pressure range: 1.5 – 7 bar
- Voltage: 24 V DC
- Temperature range: −5 ... +50 °C
- IP40, IP65

VUVS-L Solenoid valves

- Valve sizes: 20, 25, 30
- Valve functions: 3/2, 5/2, 5/3-way
- In-line valves
  - Flow rate up to 700, 1300, 2300 l/min
  - Width: 21, 26.5, 31 mm
  - Voltage: 12, 24 V DC ; 24, 110, 120, 230, 240 V AC
- Piston spool with sealing cartridge. Operating voltage can be easily altered by changing the solenoid coil.

Generally ready for shipping ex works in 24 h
VUVS-...-S Solenoid valves
- Valve functions: 3/2, 5/2-way
- In-line valves/individual valves, semi in-line valves, sub-base valves
- Flow rate: 550, 1000 l/min
- Width: 20, 25 mm
- Voltage: 12, 24 V DC
- Piston spool with sealing cartridge or with sealing ring

VSVA Standard valves to ISO 15407-1
- ISO 5599-1 with M8 or M12 central plug
- Valve functions: 5/2, 5/3, 2x 3/2
- Sub-base valves, solenoid actuated, pilot actuated
- Flow rate: 400 ... 1400 l/min
- Voltage: 12, 24 V DC; 24, 110 or 230 V AC

Generally ready for shipping ex works in 24 h
Air Preparation

**PUN-H/PUN-H-T Plastic tubing**

- Outside diameter: 2, 3, 4, 6, 8, 10, 12, 14, 16 mm
- Operating pressure: −0.95 ... 10 bar
- Ambient temperature: −35 ... 60 °C
- Operating medium: compressed air, vacuum, water
- Materials: TPE-U(PU); conforms to RoHS and free of copper
- Colours: blue, black, silver, neutral, translucent blue

**PUN Plastic tubing**

- Outside diameter: 3, 4, 6, 8, 10, 12, 14, 16 mm
- Operating pressure: −0.95 ... 10 bar
- Ambient temperature: −35 ... 60 °C
- Operating medium: compressed air, vacuum
- Materials: TPE-U(PU); conforms to RoHS and free of copper and PTFE
- Colours: blue, black, silver

**MS2/MS4/MS6 Compressed air preparation, MS series**

MS series, from individual devices to service unit combinations:
- Soft-start valves MS-DL
- Soft-start/quick exhaust valves MS-SV
- On-off valves MS-EE, MS-EM1
- Pressure regulators MS-LR
- Filter regulators MS-LFR
- Service unit combinations MSB

<table>
<thead>
<tr>
<th>Version</th>
<th>MS2</th>
<th>MS4</th>
<th>MS6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connection sizes</td>
<td>M5, Q56</td>
<td>G1/8, 1/4, 3/8</td>
<td>G1/4, 3/8, 1/2, 3/4</td>
</tr>
<tr>
<td>Grid dimension [mm]</td>
<td>25</td>
<td>40</td>
<td>62</td>
</tr>
<tr>
<td>Flow rate of LFR qN [l/min.]</td>
<td>150 / 330</td>
<td>1700</td>
<td>6200</td>
</tr>
<tr>
<td>Permissible primary pressure [bar]</td>
<td>Max. 7</td>
<td>Max. 14</td>
<td>Max. 20</td>
</tr>
<tr>
<td>Operating temperature [°C]</td>
<td>−5 ... +50</td>
<td>−10 ... +60</td>
<td></td>
</tr>
</tbody>
</table>

Generally ready for shipping ex works in 24 h
**HGL Piloted check valves**

- Compact design – piloted non-return function
- Rotatable 360° around the screw-in axis after installation

**QS push-in fittings**

- Connections:
  - Standard series QS: R1/8, R1/4, R1/2, R3/8, G1/8, G1/4, G1/2, G3/8, G3/4
  - Mini series QSM: M3, M5, M6, M7, M8, R1/8, G1/8
- For outside tubing diameter:
  - Standard series QS: 4, 6, 8, 10, 12, 16 mm
  - Mini series QSM: 2, 3, 4, 6 mm
- Threaded port:
  - G thread with sealing ring
  - R thread with PTFE coating
  - Metric thread with sealing ring (to QSM)
- L-shape, T-shape, X-shape, Y-shape

<table>
<thead>
<tr>
<th>Piloted check valves</th>
<th>HGL-...QS-..., with push-in connector QS</th>
<th>HGL-...B, with female thread</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pneumatic connection 2</td>
<td>M5, G1/8, G1/4, G3/8, G1/2</td>
<td>M5, G1/8, G1/4, G3/8, G1/2</td>
</tr>
<tr>
<td>Flow rate [l/min]</td>
<td>130 ... 1400</td>
<td>130 ... 1600</td>
</tr>
<tr>
<td>Operating pressure [bar]</td>
<td>0.5 ... 10</td>
<td></td>
</tr>
<tr>
<td>Temperature range</td>
<td>−10 ... +60 °C</td>
<td></td>
</tr>
</tbody>
</table>

**NHPS coupling sockets/plugs**

- AG connection: G1/8, G1/4, G3/8, G1/2
- IG connection: G1/4, G3/8, G1/2
- Barbed connector: N9
- Certified by IFA (Institute for Occupational Safety and Health)

**KD4 Quick coupling sockets**

- Connection M3, M5, G 1/8, G 1/4, G 3/8, G 1/2
- Diameter 2, 3, 4, 6, 9, 13 mm
- Threaded connection
  - Metric thread with sealing ring
  - G thread with sealing ring
- Shut-off on one side
- Shut-off on both sides
- Safety coupling to ISO 4414

★ Generally ready for shipping ex works in 24 h
Air Preparation

Generally ready for shipping ex works in 24 h

**U/U-B/UB Silencers**
- For noise reduction at the exhaust ports of pneumatic components
- Polymer of die-cast metal
- Silencer insert materials: PE /bronze
- Threaded connection
- RoHS-compliant designs

<table>
<thead>
<tr>
<th>Version</th>
<th>GRLA-..., D, for exhaust air</th>
<th>GRLZ-..., D, for supply air</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screw-in thread (male thread)</td>
<td>M5, G1/8, G1/4, G3/8, G1/2</td>
<td>M5, G1/8</td>
</tr>
<tr>
<td>Adjustment component</td>
<td>Slotted head or knurled screw</td>
<td></td>
</tr>
<tr>
<td>QS plug-in connector</td>
<td>Q5 3, 4, 6, 8, 10, 12 mm</td>
<td>Q5 3, 4, 6, 8 mm</td>
</tr>
<tr>
<td>Operating pressure</td>
<td>0.2 ... 10 bar</td>
<td></td>
</tr>
<tr>
<td>Temperature range</td>
<td>−10 ... +60 °C</td>
<td></td>
</tr>
</tbody>
</table>

www.festo.com/catalogue/u

**AMTE Silencers**
- For machine tool making in the packaging industry, automotive industry or woodworking industry
- Suitable for reducing noise at the exhaust ports of pneumatic systems
- Metal design, short and long versions
- Silencer insert materials: bronze
- Threaded connection

<table>
<thead>
<tr>
<th>Version</th>
<th>AMTE-M-LH-..., long version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connection</td>
<td>G1/8, G1/4, G3/8, G1/2, G3/4, G1, M3, M5, NPT1/8, NPT1/4, NPT-3/8, NPT-1/2, UNF10-32</td>
</tr>
<tr>
<td>Noise level</td>
<td>72 ... 88 dB(A)</td>
</tr>
</tbody>
</table>

www.festo.com/catalogue/amte

**GRLA-..., D/GRLZ-..., D One-way flow control valves**
- Standard flow control valves, Series D, with QS push-in connector for standard O.D. tubing
- Rotatable 360° around the screw-in axis after installation

<table>
<thead>
<tr>
<th>Valve function</th>
<th>GRLA-..., D, for exhaust air</th>
<th>GRLZ-..., D, for supply air</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screw-in thread (male thread)</td>
<td>M5, G1/8, G1/4, G3/8, G1/2</td>
<td>M5, G1/8</td>
</tr>
<tr>
<td>Connection</td>
<td>G1/8, G1/4, G3/8, G1/2, G3/4, G1</td>
<td>G1/8, G1/4, G3/8, G1/2, G3/4, G1, NPT3/4-14, NPT1-11</td>
</tr>
<tr>
<td>Noise level</td>
<td>77 ... 80 dB(A)</td>
<td>77 ... 80 dB(A)</td>
</tr>
</tbody>
</table>

www.festo.com/catalogue/grza

www.festo.com/catalogue/grxz
CMSX Positioners for linear and quarter turn actuators
• NAMUR interface (VDI/VDE 3845)
• LCD with backlighting
• Configurable setpoint value (input signal):
  0 ... 10 V, 0 ... 20 mA, 4 ... 20 mA
• Position feedback signal: 4 ... 20 mA
• Operating pressure: 3 ... 8 bar
• Operating temperature: -5 ... 60 °C
• Flow rate: 50 and 130 l/min
• Safety functions:
  - Fail safe close or fail safe open option
  - Fail safe freeze option (hold last position)

SRBC Sensor boxes
• Ideal for outdoor and indoor applications in harsh environments:
  - IP67 and NEMA 4/4X
  - ATEX II 2G c T6 X, II 2D c 85 °C X
  - SIL 2 to IEC 61 508
  - Ambient temperature: -20 ... 80 °C
• Measuring principles:
  - Contacting (reed)
  - Proximity sensor, inductive
  - Contact potential-free, changeover switch

DFPD Quarter turn actuators
• With rack and pinion gear unit
• Size: 10, 20, 40, 80, 120
• Nominal operating pressure: 5.5 bar
• Torque: 10 ... 120 Nm
• Ambient temperature: -20 ... 80 °C
• Swivel angle: 90°
• Flange hole pattern to ISO 5211
• NAMUR connection pattern for solenoid valves/sensor boxes to VDI/VDE 3845
VZWD Single solenoid valves, 2/2-way
- Respond from 0 bar up to max. 90 bar operating pressure
- Directly actuated, in-line valves, normally closed, electric actuation
- Poppet valves with mechanical spring return
- Female threads: G1/8, G1/4, 1/8 NPT, 1/4 NPT
- Nominal size DN: 1, 1.5, 2, 2.5, 3, 4, 5, 6
- Suitable for use in vacuum technology, venting gas and tank systems, and safety shut-offs for burner controllers

VSNC Standard NAMUR valves, IEC EX-certified
- Single solenoid: 5/2- or 3/2-way, convertible
- Double solenoid: 5/2- or 5/3-way (B, E, G)
- VDI/VDE 3845 (NAMUR)
- Mechanical spring return
- Manual override: detenting, non-detenting, none
- Voltage: 12, 24 V DC; 24, 48, 120, 230 V AC
- Operating pressure: 2.5 ... 10 bar
- Temperature range: −20 ... 60 °C

Generally ready for shipping ex works in 24 h
**VZXF Angle seat valves, 2/2-way**
- Externally actuated, in-line valves, normally closed
- Poppet valves with mechanical spring return
- Media flow:
  - Above valve seat: closing in the direction of the media; for gaseous media
  - Below valve seat: closing against the direction of the media; for gaseous and liquid media
- G threads and NPT threads
- Connection sizes: 1/2, 3/4, 1, 1 1/4, 1 1/2, 2
- Nominal pressure: PN10, PN40
- Temperature of medium: Standard NBR –10 ... 80 °C, PTFE –40 ... 200 °C

**VZW Single solenoid valves, 2/2-way**
- Force pilot operated solenoid valves, in-line valves normally closed
- Female threads: G1/4, G3/8, G1/2, G3/4, G1, G1 1/2, G2
- NPT threads: 1/4, 3/8, 1/2, 3/4, 1, 1 1/4, 1 1/2, 2
- Operating pressure: 0 ... 10 bar, depending on coils used and nominal diameter
- Suitable for closed applications, such as cooling or filling systems, vacuum, liquid gas, bottling systems, etc.

**VZWM Solenoid valves, 2/2-way**
- Servo-operated solenoid valves, in-line valves, normally closed
- Female threads: G1/4, G3/8, G1/2, G3/4, G1, G1 1/4, G1 1/2, G2
- NPT threads: 1/4, 3/8, 1/2, 3/4, 1, 1 1/4, 1 1/2, 2
- Nominal operating pressure:
  - Gases 0.5 ... 10 bar
  - Fluids 0.5 ... 6 bar

⭐ Generally ready for shipping ex works in 24 h
Assembled for you from stock items

Up to $6 \times 10^{12}$ variants per product series
ERMO Electric semi-rotary drives
- Size: 12, 16, 25, 32
- Max. driving torque: 0.15 ... 5 Nm
- Infinite rotation angle

EPCO Electric cylinders
- Size: 16, 25, 40
- Stroke length: 50 ... 400 mm
- Force: 50 ... 650 N
- Linear drive with piston rod and motor

ESBF Electric cylinders
- Size: 32, 40, 50, 63, 80, 100
- Stroke length: 30 ... 1500 mm
- Force: 600 ... 17000 N
- Motor can be mounted using axial or parallel kit
- Linear drive with ball screw in Clean Design

Toothed belt axes ELGA
- High speeds of up to 10 m/s
- High lateral forces and torques
- Size: 70, 80, 120, (150)
- Max. stroke length: 7400 mm (8500 mm)
- Force 350 ... 1300 N (... 2000 N)
- Integrated guide.

Generally ready for shipping ex works in 5 days. Please contact us for details.
**EGC-BS Spindle axes**
- Size: 70, 80, 120, 185
- Stroke length: 50 ... 3000 mm
- Force: 300 ... 3000 N

**EGC-TB Toothed belt axes**
- Size: 50, 70, 80, 120, 185
- Stroke length: 1 ... 8500 mm (longer strokes on request)
- Force: 50 ... 2500 N

**EMMS-ST Stepper motors**
- Size: 28, 42, 57, 87
- Holding torque: 0.09 ... 8.6 Nm
- Voltage: 24 ... 72 V DC
- Nominal current: 1.4 ... 9.5 A
- Suitable motor cable, motor flange

**Toothed belt axes ELGC-TB**
- Size 45, 60, 80
- Max. stroke length: 2000 mm
- Force 75 ... 250 N
- Integrated recirculating ball bearing guide

**EGSC Mini-slides**
- Size 25, 32, 45, 60
- Stroke length 25 ... 200 mm
- Integrated recirculating ball bearing guide

☆ Generally ready for shipping ex works in 5 days. Please contact us for details.
EMME-AS Servo motors
- Size: 40, 60, 80, 100 mm
- Nominal torque: 0.12 ... 6.4 Nm
- Nominal voltage: 360, 565 V DC
- Nominal current: 0.7 ... 4.1 A

CMMP-AS Motor controllers
- Nominal voltage: 230 V AC, 400 V AC
- Nominal current: 2 ... 30 A
- Rated power: 500 ... 18000 VA

CMMO-ST Motor controllers
- Voltage: 24 V DC
- Nominal current: 5 A
- Micro-step, 12800 steps/rev
- Closed-loop servo controller for stepper motors

CAMC Interface, memory cards
- Interfaces and memory cards for motor controller

★ Generally ready for shipping ex works in 5 days. Please contact us for details.
Valve terminal VTSA / VTSA-F

5 Valve sizes can be mixed, with maximum flow rates
- Meets ISO 15407-2/5599-2 or equipped with high-flow manifold sub-base
- Control via fieldbus/CPX or multipin
- Supply voltage 24 V DC for CPX, 24 V DC and 110 V AC for multipin
- Max. 32 valve positions/max. 32 solenoid coils
- Multiple valve functions: 5/2, 5/3, 2x 3/2, 2x 2/2, and others

CPX functionality
- Max. 10 electric modules, digital I/Os and/or Analogue I/Os
- Parameterisation of I/Os and Profisafe I/Os
- Integrated diagnostics and preventive maintenance concepts

Valve terminal MPA-S

- Flow rate: 360 ... 700 l/min
- Width: 10 mm, 20 mm
- Variability: flexible pressure supply, variable pressure zones, additional pressure supply at any position
- Serial valve control – up to 64 valve positions or 128 coils
- Open for PROFIBUS-DP, INTERBUS, CANopen, DeviceNet, CC-Link
- Pressure range: −0.9 ... 10 bar
- Degree of protection: IP65
- Multipin plug connection, CPI-, AS-Interface and fieldbus connection via modular electrical terminal Type CPX

Valve terminal MPA-L

- Manifold sub-base in polymer design
- Protection against tampering by fixed throttle
- 3 valve sizes can be mixed, expandable in individual steps
- Flow rate: 160 – 870 l/min
- Width: 10, 14 and 20 mm
- Push-in-connector: 3, 4, 6, 8, 10, 12 mm
- Degree of protection: IP65, IP67
- Valve functions: 5/2, 5/3, 2x 3/2, 2x 2/2 as well as special functions
- Multipin plug connection, I-Port/IO-Link and fieldbus connection via modular electrical terminal type CPX

OVEL Vacuum generators

- Mounting on supply manifold with max. 8 spaces
- Nominal size 0.45 ... 0.95 mm
- Connection
  - push-in connector QS3, QS4, QS6
- Vacuum solenoid valve ON/OFF
- Optional with ejector pulse
- Integrated vacuum sensor

🌟 Generally ready for shipping ex works in 5 days. Please contact us for details.
The Festo Online Shop – much more than just ordering 24/7

Would you like to know more?
Our guided tour offers more tips on how you can benefit from the services offered by our Online Shop!

www.festo.com/onlineshop

Festo core product range covers 80% of your automation tasks

Worldwide: Always in stock
Superb: Festo quality at an attractive price
Easy: Simplifies procurement and warehousing

Generally ready for shipping ex works in 24 h
Held in stock in 13 service centres worldwide!
More than 2,200 products

Generally ready for shipping ex works in 5 days
Assembled for you in 4 service centres worldwide!
Up to $6 \times 10^{12}$ variants per product series
Core product range

Customer solutions

Total product range