TOP VALUES - SIMPLE FACTS: NORI® 500, NORI® 320 & NORI® 160





Built on experience – designed for the future: NORI® 500, NORI® 320 and NORI® 160

NORI® 160

Threaded bush free from nonferrous metal, supported by needle bearings

Your benefit:

• Smooth actuation

DIN ISO FLANGE

Your benefit:

- Simple and cost-efficient installation of actuators without having to dismantle the pressure-retaining components
- No conversion required

Yoke bush free from nonferrous metal, with trapezoid thread (nitrided)

Your benefit:

• High functional reliability

Pure-graphite gland packing Your benefit:

- Increased leak tightness
- Easy to service
- Reliable sealing to atmosphere

Torque-free back seat Your benefit:

- Back-up stem seal for emergency operation
- Anti-blow out device to protect staff and plant

Internally and externally confined serrated bonnet seal Your benefit:

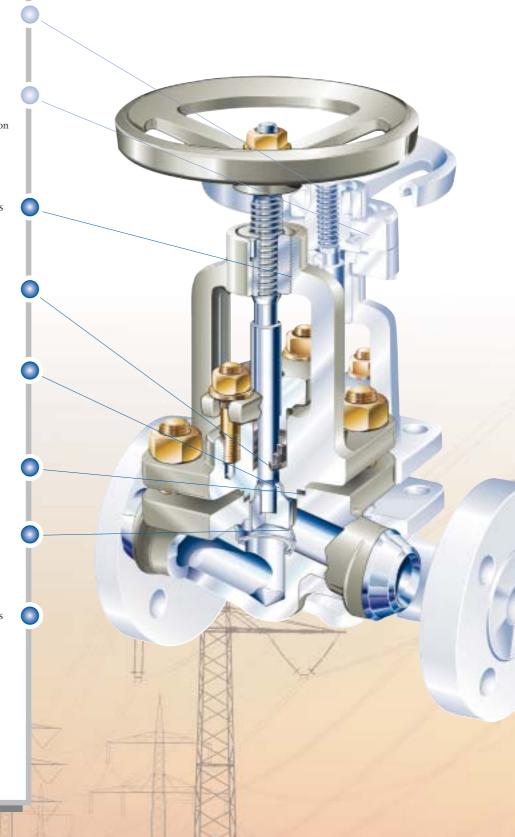
• Reliable sealing to atmosphere

VALVE SEAT MADE OF WEAR AND CORROSION RESISTANT MATERIALS Your benefit:

- High functional reliability
- Long service life

OLIVE-CHROMATED BOLTS AND NUTS Your benefit:

- Corrosion-resistant
- Easy to repair



Convincing arguments:

For more than 125 years, pumps and valves by KSB have been a veritable success story. No wonder, since some 12,800 employees around the world are committed to that goal. KSB's comprehensive pump and valve programme – for pressures up to 600 bar and temperatures up to 650°C – guarantees maximum safety standards, be it in industry and power engineering or other demanding applications. Under the most

severe operating conditions, KSB globe and gate valves satisfy the most stringent of process requirements while meeting global engineering standards. KSB pumps and valves do service in more than 1,000 power plants. KSB's comprehensive field service ensures high levels of plant availability. Not least among the arguments most convincing for KSB customers are the products' good cost-benefit ratios and great per-

formance. With NORI® 160, NORI® 320 and now NORI® 500, KSB provides globe valve series for first-class operation and function as well as ensured long-term leak tightness.

The new NORI® 500, featuring a single-piece body without separate bonnet, optimally and reliably covers even the most demanding industrial and power engineering applications.



NORI® 500

Applications: industrial plants, power stations, process engineering systems, shipbuilding; water, steam, gas, oil and other non-aggressive media

Temperature range: up to 580 °C, up to 650 °C if special materials are used

Nominal pressure range:

PN 250-500

Nominal diameters:

DN 10-65

NORI® 320

Applications: industrial plants, power stations, process engineering systems, shipbuilding; water, steam, gas, oil and other non-aggressive media

Temperature range:

up to 580°C

Nominal pressure range:

PN 250-320

Nominal diameters:

DN 10-50





NORI® 160

Applications: industrial plants, power stations, process engineering systems, shipbuilding; water, steam, gas, oil and other non-aggressive media

Temperature range:

up to 550°C

Nominal pressure range:

PN 63-160

Nominal diameters:

DN 10-200



THREADED BUSH FREE FROM
NONFERROUS METAL GUIDED BETWEEN
NEEDLE BEARINGS; WITH CUP SPRINGS
AND COVER PLATE

Your benefit:

- Smooth opening and closing operation
- Absolute tight sealing at disc/seat interface even with fluctuating temperatures
- Insensitive to dirt

YOKE TOP WITH BAYONET JOINT DESIGNED TO ACCEPT A DIN ISO FLANGE

Your benefit:

- Simple installation of actuators without having to dismantle the pressure-retaining components
- No conversion required

POSITION INDICATOR AS A STANDARD WITH LOCATING DEVICE TO HOLD THE STEM IN PLACE

Your benefit:

- Globe valve position can always be checked
- High operating reliability

Pure-graphite gland packing Your benefit:

- Easy to service
- Reliable sealing to atmosphere

Bayonet-type valve body/yoke joint **Your benefit:**

• Easy to service through fast and simple installation and dismantling

SINGLE-PIECE BODY WITHOUT SEPARATE BONNET

Your benefit:

- No bonnet bolts that need to be retightened
- Just one sealing point to atmosphere

THROTTLING VALVE PLUG AS A STANDARD

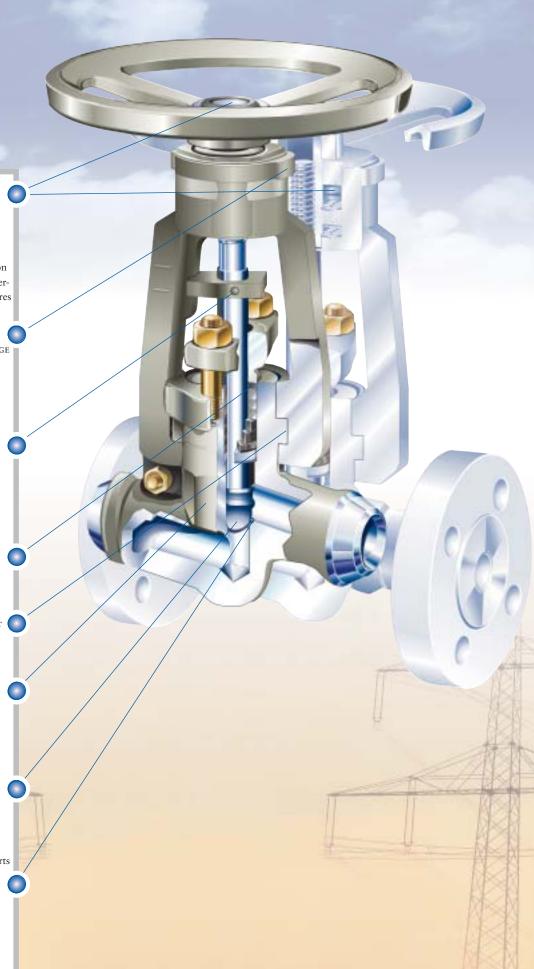
Your benefit:

- One valve model for shut-off and throttling
- Reduction in inventories and spare parts

Valve seat made of wear and corrosion resistant stellite

Your benefit:

- High functional reliability
- Long service life





Threaded bush free from nonferrous metal, with cover plate and supported by needle bearings

Your benefit:

- Smooth actuation
- Insensitive to dirt

Yoke top designed to accept a DIN ISO flange

Your benefit:

 Installation of actuators without having to dismantle the pressureretaining components

POSITION INDICATOR AS A STANDARD WITH LOCATING DEVICE TO HOLD THE STEM IN PLACE

Your benefit:

- Globe valve position can always be checked
- High operating reliability

Pure-graphite gland packing Your benefit:

- Easy to service
- Reliable sealing to atmosphere

BAYONET-TYPE VALVE BODY/YOKE JOINT Your benefit:

• Easy to service through fast and simple installation and dismantling

Single-piece body without separate bonnet

Your benefit:

- No bonnet bolts that need to be retightened
- Just one sealing point to atmosphere

Throttling valve plug as a standard

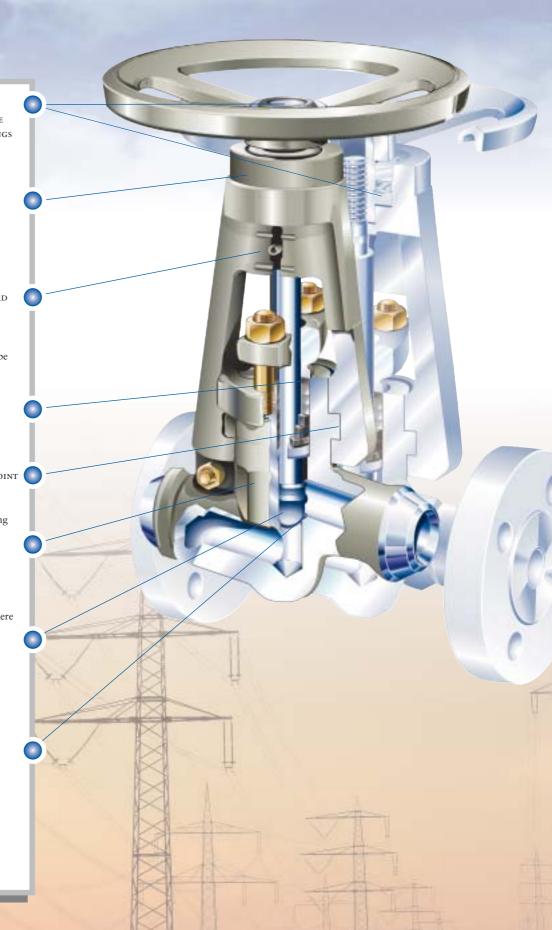
Your benefit:

- One valve model for shut-off and throttling
- Reduction in inventories and spare parts

Valve seat made of wear and corrosion resistant stellite

Your benefit:

- High functional reliability
- Long service life



KSB valves worldwide - we are where you are

KSB Valves in Europe

Austria

KSB Österreich Gesellschaft mbH, Vienna

Tel: +43 (1) 91 03 00 Fax: +43 (1) 91 03 02 02

N.V. KSB Belgium S.A., Wavre Tel: +32 (10) 43 52 11

Fax: +32 (10) 43 52 55

CZECH REPUBLIC

KSB Pumpy + Armatury, spol. s r.o., Prague

Tel: +420 (2) 41 48 02 09

Fax: +420 (2) 41 48 01 23

DENMARK

KSB A/S, Rødovre

Tel: +45 (36) 73 00 73

Fax: +45 (36) 73 00 74

Mercantile KSB Oy Ab, Helsinki

Tel: +358 (9) 3 45 01

Fax: +358 (9) 34 50 56 85

KSB S.A. (AMRI), La Roche Chalais

Tel: +33 (5) 53 92 44 00

Fax: +33 (5) 53 92 44 01

KSB Armaturen GmbH, Pegnitz

Tel: +49 (92 41) 71 16 56

Fax: +49 (92 41) 71 17 95

GREAT BRITAIN

KSB Limited, Loughborough

Tel: +44 (15 09) 23 18 72

Fax: +44 (15 09) 21 52 28

GREECE

KSB Tesma AG, Amaroussion

(Gate and Globe Valves) Tel: +30 (1) 6 80 80 71

Fax: +30 (1) 6 80 80 79

General Commercial & Industrial S.A.,

Aspropyrgos (Butterfly Valves)

Tel: +30 (1) 5 57 49 28

Fax: +30 (1) 5 57 23 43

KSB Szivattyu és Armatura, Kft., Budapest

Tel: +36 (1) 2 09 37 35

Fax: +36 (1) 2 09 37 78

KSB Italia S.p.A., Concorezzo

Tel: +39 (039) 6 04 80 00

Fax: +39 (039) 6 04 81 53

Luxemburg

SISTO Armaturen S.A., Mersch

Tel: +352 3 25 08 51

Fax: +352 32 89 56

NETHERLANDS

KSB Nederland B.V., Zwanenburg

Tel: +31 (20) 4 07 98 00

Fax: +31 (20) 4 07 98 05

Econosto B.V., Rotterdam (SISTO)

Tel: +31 (1) 02 84 13 47

Fax: +31 (1) 02 84 12 12

Norway

Lindflaten A.S., Oslo

Tel: +47 (2) 2 42 39 90

Fax: +47 (2) 2 41 57 25

POLAND

KSB Pompy i Armatura Sp. z o.o.,

Warsaw

Tel: +48 (22) 6 73 08 96

Fax: +48 (22) 6 73 08 95

KSB Bombas e Válvulas S.A., Algés

Tel: +351 (21) 4 12 30 50

Fax: +351 (21) 4 12 30 55

Romania

Multigama Tech SRL, Bucharest

Tel: +40 (1) 2 10 25 89

Fax: +40 (1) 2 10 14 17 RIISSIA

KSB-Repräsentanz Moskau, Moscow

Tel: +7 (095) 9 35 71 73

Fax: +7 (095) 9 35 71 69

SLOVAK REPUBLIC

KSB Cerpadlá a Armatúry, spol. s.r.o.,

Bratislava

Tel: +421 (7) 43 33 39 16

Fax: +421 (7) 43 33 74 44

SPAIN

KSB-AMVI S.A., Madrid

Tel: +34 (91) 7 24 22 10

Fax: +34 (91) 7 24 22 11

SWEDEN

KSB Mörck AB, Gothenburg

Tel: +46 (31) 7 20 24 00

Fax: +46 (31) 7 20 24 99

SWITZERLAND

KSB Zürich AG, Zurich

Tel: +41 (1) 2 72 99 33

Fax: +41 (1) 2 72 66 76

KSB Pompa, Armatür Sanayi ve

Ticaret A.S., Ankara

Tel: +90 (312) 4 37 11 75

Fax: +90 (312) 4 37 65 37

KSB Valves in Africa

SOUTH AFRICA

KSB Pumps (S.A.) (Pty.) Ltd., Germiston

Tel: +27 (11) 8 76 56 00

Fax: +27 (11) 8 28 02 44

KSB Valves in the Americas

KSB Compañía Sudamericana de

Bombas S.A., Buenos Aires

Tel: +54 (11) 47 66 30 21

Fax: +54 (11) 47 66 54 49

KSB Bombas Hidráulicas S.A.,

Várzea Paulista / São Paulo

Tel: +55 (11) 78 66 87 02 Fax: +55 (11) 78 66 87 47

KSB Chile S.A., Santiago

Tel: +56 (2) 6 24 60 04

Fax: +56 (2) 6 24 10 20

KSB de Mexico S.A. de C.V., Mexico Tel: +52 (5) 2 07 48 66

Fax: +52 (5) 5 14 18 46

USA

AMRI Inc., Houston

Tel: +1 (713) 6 82 00 00

Fax: +1 (713) 6 82 00 80

VENEZUELA

KSB Venezolana, C.A., Caracas

Tel: +58 (2) 2 39 54 90

Fax: +58 (2) 2 38 29 16 KSB Valves in Asia

KSB Ajax Pumps Pty. Ltd., Tottenham

Tel: +61 (3) 93 14 06 11

Fax: +61 (3) 93 14 74 35

CHINA

KSB AMRI Representative Office,

Tel: +86 (10) 65 91 57 68

Fax: +86 (10) 65 91 57 69

Hong Kong

KSB Limited, Hong Kong

Tel: +852 21 47 12 20 Fax: +852 21 47 12 30

KSB Pumps Ltd., Coimbatore

Tel: +91 (422) 89 25 47

Fax: +91 (422) 89 26 50

Indonesia PT. KSB Indonesia, Jakarta

Tel: +62 (21) 45 84 20 70 Fax: +62 (21) 45 84 20 71

IAPAN

KSB Ltd., Tokyo

Tel: +81 (3) 34 32 53 77

Fax: +81 (3) 34 32 73 65

KORFA

KSB Korea Ltd., Seoul Tel: +82 (2) 7 90 43 51

Fax: +82 (2) 7 90 43 50

Malaysia

KSB AMRI Malaysia, Selangor D.E.

Tel: +60 (3) 77 81 35 10

Fax: +60 (3) 77 81 35 11

PHILIPPINES

KSB Philippines Representative office

Santiago Village, Makati City Tel: +63 (2) 8 90 98 33

Fax: +63 (2) 8 96 69 31

PAKISTAN

KSB Pumps Co. Ltd., Lahore

Tel: +92 (42) 6 30 41 73 Fax: +92 (42) 6 36 88 78

AMRI Pte. Ltd., Singapore

Tel: +65 5 55 03 66

Fax: +65 5 53 35 00 TAIWAN

THAILAND

KSB Taiwan Co., Ltd., Kaohsiung

Tel: +886 (7) 3 30 77 24 Fax: +886 (7) 3 30 75 48

KSB Pumps Co., Ltd., Bangkok

Tel: +66 (2) 9 88 23 24 Fax: +66 (2) 9 88 22 13

