Grundfos Industrial Products Price List June 2022 Category 2





PRODUCTS INCLUDED:

NB(E)
CRI(E), CRN(E)
CRT
CM(E), CMB, CMBE
MTA, MTH, MTR
SPK







PLEASE NOTE THE FOLLOWING FROM OUR TERMS AND CONDITIONS OF SALE:

A copy of our full terms and conditions are available at the back of this price list & all prices are delivered at place (DAP) and subject to VAT at the standard rate.

MINIMUM ORDER VALUE

Our minimum order value is £55.00 NET. Orders between the minimum order value and the low order threshold of £335.00 NET for pumps or £130.00 NET for Category 4, S1,S2,S3,S4 items will be subject to a £37.00 NET handling fee.

EXPRESS DELIVERY OPTIONS;

INTERSPEED (PER ITEM) (above 150 Kgs - subject to transport availability and additional cost)

- CR(I)(E), CRN(E) Vertical Multistage
- Non-stock SP/SPA models (with or without drop cable cut in 5 metre increments. Please note; resin cable joint will take 24 hours to set)
- Order must be received electronically by 10.45am despatch same day, delivery by Express Carrier Service UK (*note restrictions apply) £120.00 NET (PER ITEM)

BOXSPEED (PER ITEM) - (above 100 Kgs - subject to transport availability and additional cost)

- ALPHA, UPS, UPN, UPS3/UPM Circulators
- Magna (D) Glandless Circulators
- UP/UPS/Magna Replacement Heads/Terminal boxes
- TPE(D), NB(E) Glanded
- CM, CME Horizontal Multistage
- JP, MQ and Tanks/Vessels (up to 500 Litre)
- CMB(E), Boosters, Scala
- AP, KP, CC, SL1, SLV, Unilift, Sololift
- SQ, SQE, SB(A), SP2A, 3A & 5A >1.5kW (Excluding pumps with cable fitted as well as SP longer than 2.4 metres)
- Motors, Flanges & Unions, Pump Components, Chamber Stacks
- Order must be received electronically before 13:30pm despatch same day, delivery by Express Carrier Service UK (*note restrictions apply) FIRST ITEM £90.00 NET & ADDITIONAL ITEMS £40.00 EACH (PER ORDER)

SPARESPEED (PER ITEM)

- Only applies to spares kits, (not chamber stacks, components, pump heads or terminal boxes)
- Order must be received electronically before 13:30pm despatch same day, delivery by Express Carrier Service UK (*note restrictions apply) FIRST ITEM £75.00 NET & ADDITIONAL ITEMS £35.00 EACH (PER ORDER)
- * Express Carrier Service ONLY guaranteed if placed on time via Extranet/EDI. Deliveries to the Highlands, certain mainland post codes and offshore UK may take an extra day. All services are dependent on component and product availability. Grundfos can guarantee despatch or availability for collection same day but cannot guarantee delivery. Grundfos cannot accept any cancellations or amendments once the goods have been despatched. Cancellations are subject to the Product Returns Fee below. BREXIT Express delivery cut off times for deliveries into the UK from an EU have changed from 1:30PM to 10:00AM & all deliveries to Northern Ireland will all be despatched from our DC in Sunderland only.

SPARES STANDARD DELIVERY CHARGE

- A £30.00 NET handling fee will be applied, per order, to all orders for spares, pump components, spares kits.
- This charge does NOT apply if SPARESPEED, express service or our online ordering system (EDI), and/or Extranet are used for order placement.

PRODUCT RETURNS FEE

• On receipt of written agreement from Grundfos, items can be returned and will be subject to a minimum 35% restocking fee. Goods must be returned in their original packaging and within 6 months of date of despatch. All returns will be subject to inspection, to ascertain age, condition and product type and can incur an increased restocking charge. Please contact grundfos-uk@sales.grundfos.com with the original purchase order, to arrange collection. Do not send items to Grundfos as they will be refused delivery, collection will be arranged.

Exclusions to Product Returns apply;

- Items with a NET value of £150.00 or less (per item).
- All Service kits, cable including attached to pump, assembled/engineered to order product and obsolete/phased out product cannot be returned.

STORAGE CHARGE

• There will be a 2% storage charge of the item invoice value, payable per month, commencing one month from the date the goods were available for delivery from Grundfos.

WARRANTY PERIOD

- Grundfos pumps are warranted for 24 months from installation or 30 months from manufacture; whichever is the sooner.
- There is a five-year warranty that covers manufacturing or material defects on domestic heating circulators: UPS3 15-50/65, UPS2 15-50/60, ALPHA models, Amazon & Amazon Universal shower pumps. From 1st March 2017 SCALA2 booster pumps when used in domestic applications were included.
- From 1st February 2020 there is a 5 year guarantee scheme Grundfos Go Guarantee, available on all MAGNA3, TPE, NBE and NKE models (conditions apply).

SERVICE AND COMMISSIONING

Grundfos offers a wide range of service, repair and commissioning options. Please contact Service on 01525 850000 or email service-uk@sales.grundfos.com

ORDER TRACKING AND PROOF OF DELIVERY

- Order status and Proof of Delivery can be obtained via Grundfos Extranet or MyGrundfos online portals.
- For extranet access contact grundfos-uk@sales.grundfos.com. Self-registration for MyGrundfos can be found here; https://uk.grundfos.com/mygrundfos

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| | NB 4 POLE NB 6 POLE | 8 |
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COMPLETE WITH 2 POLES / 2900 RPM IE3 MOTORS

| | | 380-415V 3ph 50Hz | |
|------------------------------------|------|-------------------|----------|
| | | £ Product Cod | |
| | P2 | A F2 A E | BQQE |
| Model | kW | AS F2 A I | E BQQE |
| NB 32-125.1/100 | 0.75 | 1,713 | 98127503 |
| NB 32-125.1/110 | 1.1 | 1,778 | 98052673 |
| NB 32-125.1/121 | 1.5 | 1,864 | 98124465 |
| NB 32-125.1/140 | 2.2 | 1,930 | 97925276 |
| NB 32-125/106 | 1.1 | 1,791 | 98127311 |
| NB 32-125/115 | 1.5 | 1,887 | 98042368 |
| NB 32-125/130 | 2.2 | 1,936 | 98092892 |
| NB 32-125/142 | 3 | 2,298 | 98769449 |
| | | | |
| NB 32-160.1/139 | 1.5 | 1,961 | 98177522 |
| NB 32-160.1/155 | 2.2 | 2,035 | 98654499 |
| NB 32-160.1/169 | 3 | 2,363 | 98052675 |
| NB 32-160.1/177 | 4 | 2,693 | 98630634 |
| NB 32-160/139 | 2.2 | 2,061 | 98664484 |
| NB 32-160/151 | 3 | 2,383 | 98054003 |
| NB 32-160/163 | 4 | 2,663 | 97925279 |
| NB 32-160/177 | 5.5 | 3,223 | 98856186 |
| NP 22 200 1/172 | 3 | 2,524 | 98300258 |
| NB 32-200.1/172 NB 32-200.1/188 | 4 | 2,823 | 98492835 |
| NB 32-200.1/100 NB 32-200.1/205 | 5.5 | 3,275 | 98177816 |
| NB 32-200.1/207 | 7.5 | 3,575 | 98844217 |
| NB 32-200/176 | 4 | 2,843 | 98844220 |
| NB 32-200/190 | 5.5 | 3,295 | 98281463 |
| NB 32-200/206 | 7.5 | 3,560 | 98042381 |
| NB 32-200/219 | 11 | 4,610 | 98300257 |
| 115 52 200/215 | | .,020 | 30000207 |
| NB 32-250/199 | 5.5 | 3,569 | 98844241 |
| NB 32-250/219 | 7.5 | 3,842 | 98665396 |
| NB 32-250/244 | 11 | 4,864 | 98976261 |
| NB 32-250/262 | 15 | 5,367 | 98976263 |
| • | | | |
| NB 40-125/105 | 1.5 | 2,030 | 98075312 |
| NB 40-125/116 | 2.2 | 2,088 | 98127774 |
| NB 40-125/127 | 3 | 2,472 | 98701179 |
| NB 40-125/139 | 4 | 2,766 | 98810277 |
| NB 40-125/142 | 5.5 | 3,168 | 98643514 |
| ND 40 460/444 | | 2 722 | 07022520 |
| NB 40-160/144 | 4 | 2,733 | 97933638 |
| NB 40-160/158 | 5.5 | 3,317 | 98490590 |
| NB 40-160/172 | 7.5 | 3,622 | 98833679 |
| NB 40-160/177 | 11 | 4,592 | 98488394 |
| NB 40-200/172 | 5.5 | 3,372 | 98844301 |
| NB 40-200/172 NB 40-200/188 | 7.5 | 3,678 | 98844306 |
| NB 40-200/206 | 11 | 4,723 | 98849201 |
| NB 40-200/219 | 15 | 5,172 | 98915632 |
| 145 40 200/213 | 13 | 0,272 | 30313032 |
| NB 40-250/211 | 11 | 4,829 | 98671393 |
| NB 40-250/230 | 15 | 5,300 | 98577547 |
| NB 40-250/245 | 18.5 | 5,710 | 98979905 |
| NB 40-250/255 | 22 | 6,392 | 98605465 |
| NB 40-250/260 | 30 | 8,265 | 98876844 |
| | | | |
| NB 40-315/273 | 22 | 7,289 | 98976264 |
| NB 40-315/298 | 30 | 9,000 | 98975674 |
| NB 40-315/318 | 37 | 10,367 | 98975675 |
| NB 40-315/336 | 45 | 13,712 | 98975676 |
| | | | |

ELECTRIC MOTOR

Motors up to and including 3kW are 220-240D/380-415Y V/3ph/50Hz Motors 4kW and above are 380-415D V/3ph/50Hz IP 55 Class F Insulation

All 2 poles motors up to and including 22kW are Grundfos IE3 efficiency standard. All 2 poles motors above and including 30kW are Siemens IE3 efficiency standard.

PUMPS

Standard NB pump casing and impeller in cast iron.

Pumps with Custom Built options such as different material impellers, casings and non-standard seals can be configured and priced on request by your Sales Office.

Pump housings are flanged in accordance with EN1092-2 and EN733 design standards.

| | | 380-415V 3ph 50Hz | |
|--------------------------------------|------|---------------------------------------|--------------|
| | | £ | Product Code |
| | P2 | A F2 A E | BQQE |
| Model | kW | AS F2 A E | BQQE |
| NB 50-125/111 | 3 | 2,549 | 97933635 |
| NB 50-125/121 | 4 | 2,796 | 97933643 |
| NB 50-125/135 | 5.5 | 3,356 | 98627328 |
| NB 50-125/144 | 7.5 | 3,642 | 98781395 |
| | - | , | |
| NB 50-160/136 | 5.5 | 3,372 | 97992350 |
| NB 50-160/150 | 7.5 | 3,687 | 97925281 |
| NB 50-160/167 | 11 | 4,782 | 98778278 |
| NB 50-160/177 | 15 | 5,172 | 98469280 |
| , | | , | |
| NB 50-200/181 | 11 | 5,017 | 98639963 |
| NB 50-200/198 | 15 | 5,393 | 98827298 |
| NB 50-200/210 | 18.5 | 5,799 | 98354130 |
| NB 50-200/219 | 22 | 6,504 | 98062906 |
| • | | | |
| NB 50-250/205 | 15 | 5,584 | 98979915 |
| NB 50-250/222 | 18.5 | 5,996 | 98979916 |
| NB 50-250/233 | 22 | 6,690 | 98622170 |
| NB 50-250/254 | 30 | 8,453 | 98979797 |
| NB 50-250/263 | 37 | 10,501 | 98978656 |
| | - | -, | |
| NB 50-315/267 | 30 | 9,341 | 98975677 |
| NB 50-315/285 | 37 | 10,636 | 98801946 |
| NB 50-315/300 | 45 | 12,345 | 98975678 |
| NB 50-315/321 | 55 | 14,972 | 98975680 |
| 00 010,011 | | _ ,,,,,, | 000,000 |
| NB 65-125/120-110 | 4 | 2,896 | 98689762 |
| NB 65-125/127 | 5.5 | 3,395 | 98106804 |
| NB 65-125/137 | 7.5 | 3,767 | 97933644 |
| NB 65-125/144 | 11 | 4,839 | 98139415 |
| | | , | |
| NB 65-160/143 | 7.5 | 3,902 | 97933647 |
| NB 65-160/157 | 11 | 5,001 | 98291563 |
| NB 65-160/173 | 15 | 5,320 | 98778279 |
| NB 65-160/177 | 18.5 | 5,772 | 98449920 |
| , | | · · · · · · · · · · · · · · · · · · · | |
| NB 65-200/162 | 11 | 5,243 | 98979917 |
| NB 65-200/177 | 15 | 5,621 | 98979918 |
| NB 65-200/190 | 18.5 | 6,004 | 98967170 |
| NB 65-200/198 | 22 | 6,704 | 98092105 |
| NB 65-200/217 | 30 | 8,486 | 98978642 |
| NB 65-200/219 | 37 | 10,559 | 98883060 |
| , | | | |
| NB 65-250/223 | 30 | 8,615 | 98975692 |
| NB 65-250/238 | 37 | 9,870 | 98761286 |
| NB 65-250/251 | 45 | 11,834 | 98975693 |
| NB 65-250/269 | 55 | 13,545 | 98975694 |
| NB 65-250/270 | 75 | 16,557 | 98564391 |
| | | | |
| NB 65-315/272 | 55 | 13,703 | 98975695 |
| NB 65-315/295 | 75 | 16,718 | 98975696 |
| NB 65-315/308 | 90 | 19,081 | 98546406 |
| NB 65-315/320 | 110 | 25,088 | 98975697 |
| ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | | |
| NB 80-160/147-127 | 11 | 5,208 | 98447791 |
| NB 80-160/151 | 15 | 5,567 | 98354769 |
| NB 80-160/161 | 18.5 | 5,958 | 98674339 |
| NB 80-160/167 | 22 | 6,857 | 98423647 |
| NB 80-160/107 | 30 | 9 594 | 98674340 |

NB 80-160/177 SUPPORT BLOCKS

Pumps listed in the darker shaded area include Support Blocks

30

COUNTER FLANGES

98674340

Pump Counter Flanges are supplied as optional extras and are indicated on page 22.

8,594



COMPLETE WITH 2 POLES / 2900 RPM IE3 MOTORS

| | | 380-415V 3ph 50Hz | |
|--------------------|------|-------------------|--------------|
| | | £ | Product Code |
| | P2 | A F2 A E | BQQE |
| Model | kW | AS F2 A I | E BQQE |
| NB 80-200/171 | 22 | 6,629 | 98599191 |
| NB 80-200/188 | 30 | 8,871 | 98827295 |
| NB 80-200/200 | 37 | 9,928 | 98674338 |
| NB 80-200/211 | 45 | 11,892 | 98834914 |
| NB 80-200/222 | 55 | 13,545 | 98768407 |
| | | | |
| NB 80-250/220 | 45 | 11,945 | 98720532 |
| NB 80-250/234 | 55 | 13,656 | 98975698 |
| NB 80-250/257 | 75 | 15,738 | 98653174 |
| NB 80-250/270 | 90 | 18,249 | 98975699 |
| | | | |
| NB 80-315/278 | 90 | 18,624 | 98975700 |
| NB 80-315/295 | 110 | 25,602 | 98975721 |
| NB 80-315/310 | 132 | 28,066 | 98975722 |
| NB 80-315/328 | 160 | 31,936 | 98975723 |
| | | | |
| NB 100-160/160-154 | 18.5 | 5,941 | 98976327 |
| NB 100-160/167 | 22 | 6,859 | 98976326 |
| NB 100-160/176 | 30 | 8,190 | 98975993 |
| | | | |
| NB 100-200/170 | 30 | 8,500 | 98975724 |
| NB 100-200/181 | 37 | 9,310 | 98647850 |
| NB 100-200/192 | 45 | 11,460 | 98828352 |
| NB 100-200/203 | 55 | 12,986 | 98975725 |
| NB 100-200/219 | 75 | 15,251 | 98975726 |
| | | | |
| NB 100-250/205 | 55 | 13,257 | 98975867 |
| NB 100-250/229 | 75 | 15,784 | 98975866 |
| NB 100-250/242 | 90 | 17,736 | 98975865 |
| NB 100-250/258 | 110 | 24,900 | 98975864 |
| NB 100-250/274 | 132 | 27,737 | 98975863 |
| | | | |
| NB 100-315/269 | 110 | 25,602 | 98975727 |
| NB 100-315/284 | 132 | 28,436 | 98975728 |
| NB 100-315/301 | 160 | 32,683 | 98975729 |
| NB 100-315/322 | 200 | 38,685 | 98975730 |
| | | | |

Pumps listed in the darker shaded area include Support Blocks

ELECTRIC MOTOR

Motors 4kW and above are 380-415D V/3ph/50Hz IP 55 Class F Insulation

All 2 poles motors up to and including 22kW are Grundfos IE3 efficiency standard. All 2 poles motors above and including 30kW are Siemens IE3 efficiency standard.

PUMPS

Standard NB pump casing and impeller in cast iron.

Pumps with Custom Built options such as different material impellers, casings and non-standard seals can be configured and priced on request by your Sales Office.

Pump housings are flanged in accordance with EN1092-2 and EN733 design standards.

COUNTER FLANGES

Pump Counter Flanges are supplied as optional extras and are indicated on page 22.





380-415V 3ph 50Hz

A F2 A E BQQE

AS F2 A E BQQE

11,660

13,559

16,052

18,036

25,250

18,226

25,316

28,153

32,310

38.310

29,274

34,177

40,179

16,670

18,565

25,237

27,860

31,869

37,610

35,807

39,898

P2

kW

45

55

75

90

110

90

110

132

160

200

132

160

200

75

90

110

132

160

200

160

200

Model

NB 125-200/176-154

NB 125-200/196-166

NB 125-200/205

NB 125-200/219

NB 125-200/224

NB 125-250/222

NB 125-250/236

NB 125-250/249

NB 125-250/263

NB 125-250/269

NB 125-315/262

NB 125-315/277

NB 125-315/297

NB 150-200/216-176

NB 150-200/218-202

NB 150-250/226-220

NB 150-200/224

NB 150-250/235

NB 150-250/250

NB 150-315.2/244

NB 150-315.2/262

Product Code

98975940

98975939

98860774

98975938

98975937

98975741

98975742

98975743

98975744 98975745

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98610634

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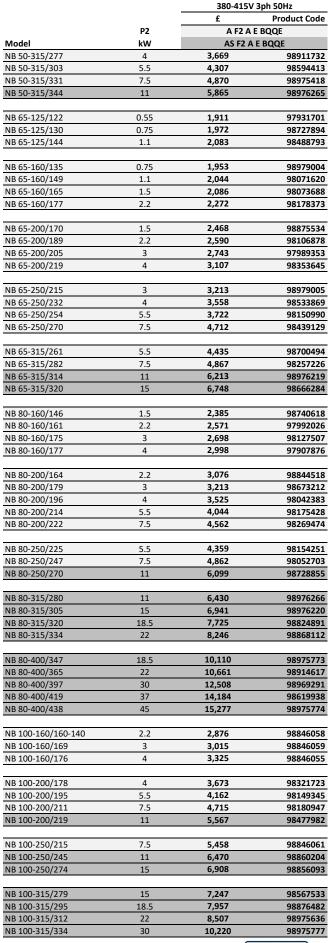
A F1 A E BQQE AS F1 A E BQQE

COMPLETE WITH 4 POLES / 1450 RPM IE3 MOTORS

| | | 380-415V | 3ph 50Hz |
|------------------------------------|--------------|----------------|----------------------|
| | | £ | Product Code |
| | P2 | A F2 A E | BQQE |
| Model | kW | AS F2 A E | BQQE |
| NB 32-125.1/121 | 0.25 | 1,426 | 98154140 |
| NB 32-125.1/139 | 0.25 | 1,426 | 97656970 |
| NB 32-125.1/140 | 0.37 | 1,440 | 98930646 |
| NB 32-125/115 | 0.25 | 1,401 | 98987645 |
| NB 32-125/130 | 0.25 | 1,401 | 97564281 |
| NB 32-125/142 | 0.37 | 1,436 | 96894223 |
| IB 32-160.1/137 | 0.25 | 1,475 | 98987644 |
| · . | 0.25 | | 98971400 |
| NB 32-160.1/155 NB 32-160.1/172 | | 1,475 | |
| NB 32-160.1/172 | 0.37 0.55 | 1,517 | 98987628 97937749 |
| NB 32-160/138 | 0.25 | 1,723 1,475 | 98987646 |
| NB 32-160/154 | 0.23 | 1,514 | 98987647 |
| NB 32-160/172 | 0.55 | 1,713 | 96550472 |
| NB 32-160/173 | 0.75 | 1,767 | 98978998 |
| | | • | |
| NB 32-200.1/175 | 0.37 | 1,626 | 98672565 |
| NB 32-200.1/196 | 0.55 | 1,819 | 96752523 |
| NB 32-200.1/207 | 0.75 | 1,887 | 98117266 |
| NB 32-200/184 | 0.55 | 1,798 | 98593070 |
| NB 32-200/197 | 0.75 | 1,853 | 98128726 |
| NB 32-200/216 | 1.1 | 1,930 | 98269499 |
| NB 32-200/219 | 1.5 | 2,099 | 98978999 |
| 10.00.050/005 | 0.75 | | |
| NB 32-250/206 | 0.75 | 2,083 | 98979000 |
| NB 32-250/236 | 1.1 | 2,183 | 98172734 |
| NB 32-250/260 | 1.5 | 2,340 | 98539538 |
| IB 32-250/262 | 2.2 | 2,543 | 98096929 |
| IB 40-125/116 | 0.25 | 1,650 | 96787441 |
| IB 40-125/130 | 0.37 | 1,669 | 96631117 |
| NB 40-125/142 | 0.55 | 1,875 | 96546730 |
| 10 10 123/112 | 0.55 | 2,070 | 303.0750 |
| NB 40-160/134 | 0.37 | 1,626 | 98987648 |
| NB 40-160/151 | 0.55 | 1,895 | 96538738 |
| IB 40-160/162 | 0.75 | 1,928 | 98283855 |
| IB 40-160/177 | 1.1 | 2,052 | 98453340 |
| | 0.75 | | |
| NB 40-200/177 | 0.75 | 1,878 | 98979001 |
| NB 40-200/198 | 1.1 | 2,092 | 98161765 |
| IB 40-200/217 | 1.5 | 2,139 | 98269479 |
| B 40-200/219 | 2.2 | 2,367 | 98269492 |
| IB 40-250/219 | 1.5 | 2,303 | 98861694 |
| NB 40-250/215 | 2.2 | 2,555 | 98045376 |
| NB 40-250/260 | 3 | 2,674 | 98533156 |
| , | | _,~. | |
| NB 40-315/283 | 3 | 3,323 | 98979003 |
| NB 40-315/305 | 4 | 3,642 | 98503608 |
| NB 40-315/334 | 5.5 | 4,158 | 98544371 |
| IB 40-315/344 | 7.5 | 4,326 | 98975417 |
| 2 50 425 /442 | 0.27 | 4.000 | 000 |
| B 50-125/113 | 0.37 | 1,626 | 98947926 |
| NB 50-125/129 | 0.55 | 1,899 | 98808056 |
| NB 50-125/138 | 0.75 | 1,933 | 98793600 |
| IB 50-125/144 | 1.1 | 2,013 | 98667812 |
| JR 50-160/121 | 0.55 | 1,946 | 08667046 |
| NB 50-160/131 | 0.55 0.75 | - | 98667846 |
| NB 50-160/139 | | 1,988 | 98965240 |
| IB 50-160/158 | 1.1 | 2,050 | 98048215 |
| NB 50-160/175 | 2.2 | 2,099 | 98366433 |
| IB 50-160/177 | L.L | 2,252 | 98158393 |
| NB 50-200/171 | 1.1 | 2,127 | 98128725 |
| NB 50-200/171 | 1.5 | 2,205 | 98734545 |
| NB 50-200/210 | 2.2 | 2,319 | 98149348 |
| NB 50-200/219 | 3 | 2,466 | 98086583 |
| , | - | , | |
| NB 50-250/221 | 2.2 | 2,477 | 98498186 |
| NB 50-250/241 | 3 | 2,615 | 98439130 |
| 10 30 230/241 | | | |

SUPPORT BLOCKS

Pumps listed in the darker shaded area include Support Blocks





COMPLETE WITH 4 POLES / 1450 RPM IE3 MOTORS

| | | 380-415V 3ph 50Hz | |
|--|------|-------------------|----------------------------|
| | | £ Product Code | |
| | P2 | A F2 A | E BQQE |
| Model | kW | | E BQQE |
| NB 100-400/334 | 22 | 10,623 | 98975924 |
| NB 100-400/360 | 30 | 12,359 | 98975923 |
| NB 100-400/375 | 37 | 14,033 | 98975922 |
| NB 100-400/395 | 45 | 15,423 | 98975921 |
| NB 100-400/415 | 55 | 17,428 | 98975910 |
| | | , - | |
| NB 125-200/176-154 | 5.5 | 4,968 | 98843507 |
| NB 125-200/196-180 | 7.5 | 5,400 | 98843510 |
| NB 125-200/219 | 11 | 6,382 | 98976322 |
| NB 125-200/226 | 15 | 6,870 | 98855932 |
| | | | |
| NB 125-250/220 | 11 | 6,653 | 98976267 |
| NB 125-250/236 | 15 | 7,136 | 98115564 |
| NB 125-250/249 | 18.5 | 7,896 | 98600057 |
| NB 125-250/262 | 22 | 8,418 | 98672953 |
| NB 125-250/269 | 30 | 10,278 | 98737312 |
| | | | |
| NB 125-315/275 | 18.5 | 9,699 | 98835476 |
| NB 125-315/290 | 22 | 10,212 | 98835478 |
| NB 125-315/317 | 30 | 12,098 | 98857197 |
| NB 125-315/336 | 37 | 13,023 | 98975779 |
| NB 125-315/338 | 45 | 14,675 | 98975780 |
| | | | |
| NB 125-400/345 | 37 | 13,477 | 98975791 |
| NB 125-400/368 | 45 | 15,127 | 98975792 |
| NB 125-400/392 | 55 | 17,367 | 98975793 |
| NB 125-400/433 | 75 | 19,756 | 98975794 |
| NB 125-400/438 | 90 | 21,348 | 98975795 |
| ND 435 500/406 | | 40 505 | 00075706 |
| NB 125-500/406 | 55 | 19,536 | 98975796 |
| NB 125-500/447 | 75 | 21,797 | 98975797 |
| NB 125-500/473 | 90 | 23,392 | 98939118 |
| NB 125-500/500 | 110 | 30,789 | 98975798 |
| NB 125-500/526 | 132 | 31,854 | 98975799 |
| NB 125-500/548 | 160 | 34,128 | 98975800 |
| | | | A F1 A E BQQE |
| NB 150-200/210-158 | 7.5 | 6,099 | AS F1 A E BQQE 98249368 |
| NB 150-200/210-138 NB 150-200/218-208 | 11 | 7,359 | |
| NB 150-200/218-208 | 15 | 7,788 | 98769189 98455883 |
| NB 130-200/224 | 15 | 7,700 | 30433003 |
| NB 150-250/226-214 | 15 | 8,354 | 98976325 |
| NB 150-250/230 | 18.5 | 9,136 | 98975972 |
| NB 150-250/242 | 22.0 | 9,627 | 98914616 |
| NB 150-250/262 | 30.0 | 11,448 | 98807421 |
| NB 150-250/275 | 37.0 | 13,169 | 98975971 |
| NB 150-250/282 | 45.0 | 14,145 | 98835475 |
| 200 200, 202 | .5.0 | | 50055475 |
| NB 150-315.2/250 | 22.0 | 9,891 | 99001639 |
| NB 150-315.2/275 | 30.0 | 11,642 | 99001640 |
| NB 150-315.2/294 | 37.0 | 13,282 | 99001641 |
| NB 150-315.2/314 | 45.0 | 14,118 | 99001643 |
| NB 150-315.2/334 | 55.0 | 16,340 | 99001644 |
| NB 150-315.2/342 | 75.0 | 18,418 | 99001662 |
| , - | | , - | |

| SUPPORT | BLOCKS |
|---------|--------|
| SUPPURI | DLUCKS |

Pumps listed in the darker shaded area include Support Blocks

ELECTRIC MOTOR

Motors 4kW and above are 380-415D V/3ph/50Hz IP 55 Class F Insulation

All 4 poles motors up to and including 15kW are Grundfos IE3 efficiency standard.

All 4 poles motors above and including 18.5kW are Siemens IE3 efficiency standard.

PUMPS

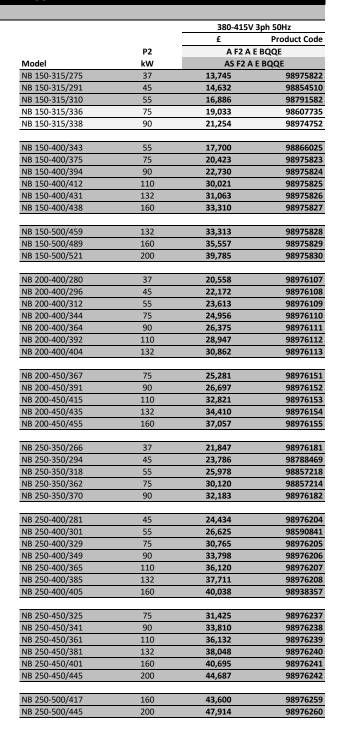
Standard NB pump casing and impeller in cast iron.

Pumps with Custom Built options such as different material impellers, casings and non-standard seals can be configured and priced on request by your Sales Office.

Pump housings are flanged in accordance with EN1092-2 and EN733 design standards.

COUNTER FLANGES

Pump Counter Flanges are supplied as optional extras and are indicated on page 22.







COMPLETE WITH 6 POLES / 960 RPM IE3 MOTORS

| | | 380-415V 3 | ph 50Hz |
|----------------------------------|------------|------------------|----------------------|
| | | £ Product Co | |
| | P2 | A F2 A E E | BQQE |
| Model | kW | AS F2 A E | |
| NB 100-160/160-140 | 0.55 | 2,580 | 98975712 |
| NB 100-160/169 | 0.75 | 2,766 | 98975711 |
| NB 100-160/176 | 1.1 | 2,876 | 98975710 |
| NB 100-200/182 | 1.1 | 3,151 | 98871702 |
| NB 100-200/193 | 1.5 | 3,257 | 98974772 |
| NB 100-200/214 | 2.2 | 3,401 | 98974571 |
| NB 100-200/219 | 3 | 3,910 | 98974773 |
| , | | • | |
| NB 100-250/216 | 2.2 | 3,480 | 98975595 |
| NB 100-250/236 | 3 | 3,985 | 98975594 |
| NB 100-250/260 | 4 | 4,241 | 98975593 |
| NB 100-250/274 | 5.5 | 4,942 | 98975592 |
| NB 100-315/272 | 4 | 4,488 | 98974774 |
| NB 100-315/272 NB 100-315/301 | 5.5 | 4,488 | 98974776 |
| NB 100-315/326 | 7.5 | 5,772 | 98975638 |
| NB 100-315/334 | 11 | 7,050 | 98975851 |
| 200 020,000 | | 1,000 | |
| NB 100-400/340 | 7.5 | 8,104 | 98975927 |
| NB 100-400/380 | 11 | 9,324 | 98975926 |
| NB 100-400/415 | 15 | 10,284 | 98975925 |
| | | | |
| NB 125-200/176-150 | 1.5 | 3,788 | 98975648 |
| NB 125-200/196-182 | 2.2 | 3,885 | 98975647 |
| NB 125-200/215 | 3 4 | 4,322 4,448 | 98975646 |
| NB 125-200/226 | 4 | 4,446 | 98975645 |
| NB 125-250/216 | 3 | 4,396 | 98974778 |
| NB 125-250/232 | 4 | 4,562 | 98974779 |
| NB 125-250/253 | 5.5 | 4,980 | 98974780 |
| NB 125-250/269 | 7.5 | 5,739 | 98975653 |
| | | | |
| NB 125-315/275 | 5.5 | 6,562 | 98974791 |
| NB 125-315/297 NB 125-315/335 | 7.5 11 | 7,394 | 98975852 98975853 |
| NB 125-315/338 | 15 | 8,575 9,538 | 98975854 |
| 112 123 323/333 | 13 | 3,000 | 30373031 |
| NB 125-400/351 | 11 | 9,372 | 98975855 |
| NB 125-400/384 | 15 | 10,377 | 98975856 |
| NB 125-400/410 | 18.5 | 11,582 | 98975857 |
| NB 125-400/434 | 22 | 12,603 | 98975858 |
| NB 125-400/438 | 30 | 13,637 | 98975859 |
| ND 135 500/431 | 10 5 | 12.470 | 09075960 |
| NB 125-500/421 NB 125-500/445 | 18.5 22 | 13,470 14,757 | 98975860 98975871 |
| NB 125-500/493 | 30 | 15,681 | 98975872 |
| NB 125-500/524 | 37 | 16,920 | 98975873 |
| NB 125-500/546 | 45 | 18,673 | 98975874 |
| NB 125-500/548 | 55 | 20,235 | 98975875 |
| | | | A F1 A E BQQE |
| | | | AS F1 A E BQQE |
| NB 150-200/210-168 | 2.2 | 4,631 | 98974567 |
| NB 150-200/218-200 | 3 | 5,099 | 98974593 |
| NB 150-200/224 | 4 | 5,352 | 98557012 |
| NB 150-250/235 | 5.5 | 6,407 | 98975688 |
| NB 150-250/252 | 7.5 | 7,343 | 98975975 |
| NB 150-250/282 | 11 | 8,585 | 98975974 |
| | | | |
| NB 150-315.2/259 | 7.5 | 7,667 | 99001645 |
| NB 150-315.2/293 | 11 | 8,819 | 99001646 |
| NB 150-315.2/328 | 15 | 9,758 | 99001647 |
| NB 150-315.2/342 | 18.5 | 10,943 | 99001675 |
| NB 150-315/280 | 11 | 9,163 | 98975876 |
| NB 150-315/305 | 15 | 10,078 | 98975877 |
| NB 150-315/322 NB 150-315/337 | 19 22 | 11,232 12,024 | 98590859 98975878 |
| NB 150-315/337 | 30 | 13,077 | 98975879 |
| 100 010, 000 | | | 555,5675 |
| | | | |

SUPPORT BLOCKS

Pumps listed in the darker shaded area include Support Blocks

| | | 380-415V 3 ₁ | oh 50Hz |
|----------------|------|-------------------------|--------------|
| | | £ | Product Code |
| | P2 | A F2 A E E | BQQE |
| Model | kW | AS F2 A E | BQQE |
| NB 150-400/357 | 18.5 | 11,967 | 98975880 |
| NB 150-400/375 | 22 | 12,776 | 98975881 |
| NB 150-400/408 | 30 | 13,868 | 98975882 |
| NB 150-400/430 | 37 | 15,331 | 98975883 |
| NB 150-400/438 | 45 | 17,358 | 98975884 |
| | | | |
| NB 150-500/457 | 37 | 17,841 | 98975885 |
| NB 150-500/483 | 45 | 19,752 | 98975886 |
| NB 150-500/513 | 55 | 21,212 | 98975887 |
| NB 150-500/548 | 75 | 23,018 | 98975888 |
| | | | |
| NB 200-400/308 | 15 | 15,189 | 98976114 |
| NB 200-400/328 | 18.5 | 16,046 | 98976115 |
| NB 200-400/348 | 22 | 18,027 | 98976116 |
| NB 200-400/384 | 30 | 19,487 | 98976117 |
| NB 200-400/404 | 37 | 22,213 | 98976118 |
| | | | |
| NB 200-450/355 | 18.5 | 16,046 | 98976156 |
| NB 200-450/371 | 22 | 18,673 | 98976157 |
| NB 200-450/407 | 30 | 20,454 | 98976158 |
| NB 200-450/431 | 37 | 22,536 | 98976159 |
| NB 200-450/451 | 45 | 23,929 | 98976160 |
| | | | |
| NB 250-350/277 | 11 | 15,692 | 98976183 |
| NB 250-350/306 | 15 | 17,572 | 98976184 |
| NB 250-350/330 | 18.5 | 18,101 | 98871350 |
| NB 250-350/366 | 22 | 20,151 | 98976185 |
| | | | |
| NB 250-400/289 | 15 | 17,895 | 98976209 |
| NB 250-400/313 | 18.5 | 18,677 | 98976210 |
| NB 250-400/329 | 22 | 20,474 | 98976221 |
| NB 250-400/361 | 30 | 23,038 | 98976222 |
| NB 250-400/381 | 37 | 24,900 | 98976223 |
| NB 250-400/401 | 45 | 26,508 | 98976224 |
| | | | |
| NB 250-450/313 | 18.5 | 19,403 | 98976243 |
| NB 250-450/325 | 22 | 21,455 | 98976244 |
| NB 250-450/357 | 30 | 24,019 | 98976245 |
| NB 250-450/377 | 37 | 25,883 | 98976246 |
| NB 250-450/397 | 45 | 26,522 | 98976247 |
| NB 250-450/433 | 55 | 27,586 | 98976248 |
| | | | |
| NB 250-500/409 | 45 | 28,780 | 98976271 |
| NB 250-500/437 | 55 | 30,168 | 98976272 |
| NB 250-500/485 | 75 | 36,048 | 98976273 |
| NB 250-500/525 | 90 | 38,620 | 98976275 |
| | | | |

ELECTRIC MOTOR

Motors up to and including 3kW are 220-240D/380-415Y V/3ph/50Hz Motors 4kW and above are 380-420D V/3ph/50Hz IP 55 Class F Insulation

All motors up to and including 0.55kW have no efficiency standard All 6 poles motors above and including 0.75kW are Siemens IE3 efficiency standard

PUMPS

Standard NB pump casing and impeller in cast iron.

Pumps with Custom Built options such as different material impellers, casings and non-standard seals can be configured and priced on request by your Sales Office.

Pump housings are flanged in accordance with EN1092-2 and EN733 design standards.

COUNTER FLANGES

Pump Counter Flanges are supplied as optional extras and are indicated on page 22.



COMPLETE WITH 2900 RPM (2 POLES) 3 PHASE VARIABLE SPEED MOTOR

| | | | 380-480/500V 3ph | 50/60Hz |
|------------------------------------|---------------|----------------------------|------------------|----------------------|
| | | | | Product code |
| | P2 | Differential pressure | A F2 A E BQ0 | |
| Model | kW | transducer range | AS F2 A E BQ | - |
| NBE 32-125.1/110 | 1.1 | 0 - 2.5 bar | 3,349 | 98983996 |
| NBE 32-125.1/121 | 1.5 | 0 - 2.5 bar 0 - 4 bar | 3,524 | 98632194 |
| NBE 32-125.1/140 NBE 32-125/106 | 2.2 | 0 - 4 bar 0 - 1.6 bar | 3,915 3,362 | 98629487 98946031 |
| NBE 32-125/115 | 1.5 | 0 - 1.6 bar 0 - 2.5 bar | 3,545 | 98650464 |
| NBE 32-125/130 | 2.2 | 0 - 2.5 bar | 3,920 | 98564298 |
| NBE 32-125/142 | 3 | 0 - 4 bar | 4,610 | 99105451 |
| NBE 32-160.1/139 | 1.5 | 0 - 2.5 bar | 3,618 | 99025305 |
| NBE 32-160.1/155 | 2.2 | 0 - 4 bar | 4,017 | 99104684 |
| NBE 32-160.1/169 | 3 | 0 - 4 bar | 4,673 | 99105452 |
| NBE 32-160.1/177 | 4 | 0 - 6 bar | 5,322 | 99101960 |
| NBE 32-160/139 | 2.2 | 0 - 4 bar | 4,042 | 99104685 |
| NBE 32-160/151 | 3 | 0 - 4 bar | 4,691 | 99105453 |
| NBE 32-160/163 | 4 | 0 - 4 bar | 5,292 | 99101765 |
| NBE 32-160/177 | 5.5 | 0 - 6 bar | 6,191 | 99106342 |
| NBE 32-200.1/172 | 3 | 0 - 4 bar | 4,829 | 99105454 |
| NBE 32-200.1/188 | 4 | 0 - 6 bar | 5,448 | 99100084 |
| NBE 32-200.1/205 | 5.5 | 0 - 6 bar | 6,244 | 99100055 |
| NBE 32-200.1/207 | 7.5 | 0 - 6 bar | 7,187 | 99101961 |
| NBE 32-200/176 | 4 | 0 - 4 bar | 5,466 | 99101962 |
| NBE 32-200/190 | 5.5 | 0 - 6 bar | 6,262 | 99100058 |
| NBE 32-200/206 | 7.5 | 0 - 6 bar | 7,173 | 99100050 |
| NBE 32-200/219 | 11 | 0 - 10 bar | 9,286 | 99101877 |
| NBE 32-250/199 | 5.5 | 0 - 6 bar | 6,529 | 99101963 |
| NBE 32-250/219 | 7.5 11 | 0 - 10 bar 0 - 10 bar | 7,445 | 99101876 |
| NBE 32-250/244 NBE 32-250/262 | 15 | 0 - 10 bar 0 - 10 bar | 9,536 10,853 | 99101964 |
| NDE 32-230/202 | 15 | 0 - 10 bai | 10,655 | 98976060 |
| NBE 40-125/105 | 1.5 | 0 - 1.6 bar | 3,687 | 98602651 |
| NBE 40-125/116 | 2.2 | 0 - 2.5 bar | 4,069 | 99014205 |
| NBE 40-125/127 | 3 | 0 - 2.5 bar | 4,777 | 99105455 |
| NBE 40-125/139 | 4 | 0 - 4 bar | 5,391 | 99100080 |
| NBE 40-125/142 | 5.5 | 0 - 4 bar | 6,138 | 99101965 |
| NBE 40-160/144 | 4 | 0 - 4 bar | 5,359 | 99101966 |
| NBE 40-160/158 | 5.5 | 0 - 4 bar | 6,283 | 99100076 |
| NBE 40-160/172 | 7.5 | 0 - 6 bar | 7,232 | 99100093 |
| NBE 40-160/177 | 11 | 0 - 6 bar | 9,270 | 99101896 |
| NBE 40-200/172 | 5.5 | 0 - 4 bar | 6,337 | 99101967 |
| NBE 40-200/188 | 7.5 | 0 - 6 bar | 7,285 | 99101879 |
| NBE 40-200/206 | 11 | 0 - 6 bar | 9,398 | 99106399 |
| NBE 40-200/219 | 15 | 0 - 10 bar | 10,665 | 98979881 |
| NBE 40-250/211 | 11 | 0 - 10 bar | 9,500 | 99101998 |
| NBE 40-250/230 | 15 | 0 - 10 bar | 10,788 | 98979852 |
| NBE 40-250/245 | 18.5 | 0 - 10 bar | 12,299 | 98979854 |
| NBE 40-250/255 | 22 | 0 - 10 bar | 13,841 | 98605464 |
| NBE 40-315/273 | 22 | 0 - 10 bar | 14,712 | 98976083 |
| NDE EO 13E/111 | า | 0.16 haz | 4 052 | 00105456 |
| NBE 50-125/111 NBE 50-125/121 | <u>3</u> 4 | 0 - 1.6 bar | 4,852 | 99105456 |
| NBE 50-125/121 NBE 50-125/135 | 5.5 | 0 - 2.5 bar 0 - 4 bar | 5,421 6,321 | 99101769 99102007 |
| NBE 50-125/135 | 7.5 | 0 - 4 bar 0 - 4 bar | 7,250 | 99102007 |
| NBE 50-160/136 | 5.5 | 0 - 4 bar | 6,337 | 99100030 |
| NBE 50-160/150 | 7.5 | 0 - 4 bar | 7,294 | 99100073 |
| NBE 50-160/167 | 11 | 0 - 4 bar | 9,454 | 99101898 |
| NBE 50-160/177 | 15 | 0 - 6 bar | 10,665 | 98468706 |
| NBE 50-200/181 | 11 | 0 - 6 bar | 9,683 | 99101748 |
| NBE 50-200/198 | 15 | 0 - 6 bar | 10,880 | 98979862 |
| NBE 50-200/210 | 18.5 | 0 - 10 bar | 12,386 | 98979864 |
| NBE 50-200/219 | 22 | 0 - 10 bar | 13,948 | 98564295 |
| NBE 50-250/205 | 15 | 0 - 6 bar | 11,064 | 98979884 |
| NBE 50-250/222 | 18.5 | 0 - 10 bar | 12,578 | 98979887 |
| NBE 50-250/233 | 22 | 0 - 10 bar | 14,129 | 98978489 |
| | | | | |

SUPPORT BLOCKS

Pumps listed in the darker shaded area include Support Blocks

Motor specification, reference to accessories and operational details are on page 10.



COMPLETE WITH 2900 RPM (2 POLES) 3 PHASE VARIABLE SPEED MOTOR

| | | | 380-480/500V 3ph 50/60Hz | |
|---------------------|------|-----------------------|--------------------------|--------------|
| | | | £ | Product code |
| | P2 | Differential pressure | A F2 A | E BQQE |
| Model | kW | transducer range | AS F2 A | E BQQE |
| NBE 65-125/120-110 | 4 | 0 - 1.6 bar | 5,519 | 99101764 |
| NBE 65-125/127 | 5.5 | 0 - 2.5 bar | 6,359 | 99101749 |
| NBE 65-125/137 | 7.5 | 0 - 2.5 bar | 7,372 | 99101897 |
| NBE 65-125/144 | 11 | 0 - 4 bar | 9,511 | 99101763 |
| NBE 65-160/143 | 7.5 | 0 - 4 bar | 7,505 | 99101878 |
| NBE 65-160/157 | 11 | 0 - 4 bar | 9,667 | 99100102 |
| NBE 65-160/173 | 15 | 0 - 6 bar | 10,807 | 98844654 |
| NBE 65-160/177 | 18.5 | 0 - 6 bar | 12,359 | 98979888 |
| NBE 65-200/162 | 11 | 0 - 4 bar | 9,901 | 99101899 |
| NBE 65-200/177 | 15 | 0 - 6 bar | 11,100 | 98979890 |
| NBE 65-200/190 | 18.5 | 0 - 6 bar | 12,586 | 98645657 |
| NBE 65-200/198 | 22 | 0 - 6 bar | 14,143 | 97907877 |
| NBE 80-160/147-127 | 11 | 0 - 2.5 bar | 9,869 | 99106396 |
| NBE 80-160/151 | 15 | 0 - 4 bar | 11,048 | 98680720 |
| NBE 80-160/161 | 18.5 | 0 - 4 bar | 12,540 | 98979869 |
| NBE 80-160/167 | 22 | 0 - 4 bar | 14,291 | 96645314 |
| NBE 80-200/171 | 22 | 0 - 6 bar | 14,070 | 98975790 |
| NBE 100-160/160-154 | 18.5 | 0 - 4 bar | 12,524 | 98976198 |
| NBE 100-160/167 | 22 | 0 - 4 bar | 14,294 | 98976197 |

SUPPORT BLOCKS

Pumps listed in the darker shaded area include Support Blocks

ELECTRIC MOTOR

380-500V 3ph 50/60Hz up to 11kW with IE5 efficiency 380-480V 3ph 50/60Hz above 15kW with IE2/IE3 efficiency IP 55 Class F Insulation

Pumps with Custom Built options such as different material impellers and non standard seals can be configured and priced on request by your Sales Office.

Pump housings are flanged in accordance with EN1092-2 and EN733 standards.

COUNTER FLANGES

Pump Counter Flanges are supplied as optional extras and are indicated on page 22.

NBE OPERATION

These models have been designed for operation in either open or closed loop control arrangements. The Default control mode is "Uncontrolled Curve / Constant curve".

NBE pumps do not include transducers for closed loop control.

Transducers can be supplied as separate items for pipework installations.

Single point pressure transducers are listed with their ranges on page 22.

The transducer ranges listed for the NBE pumps only cover the max closed valve pressure with no inlet head. Please check the inlet head to check if the transducer size needs to be increased.

There is no sensor connection point on the NBE pump and connections need to be made in the pipework.

IMPORTANT

A Grundfos GO based communication device will be required in order to commission the "E" product. See page 22 for details. This device can be used to commission and monitor multiple pumps on multiple sites.





COMPLETE WITH 1450 RPM (4 POLES) 3 PHASE VARIABLE SPEED MOTOR

| | | | <u>-</u> | 380-480/500V 3ph 50/60Hz |
|----------------------------------|--------------|---------------------------------|-----------------|----------------------------|
| | | -100 M | _ | £ Product code |
| Madal | P2 kW | Differential pressure | | A F2 A E BQQE |
| Model NBE 32-160.1/177 | 0.55 | transducer range 0 - 1.6 bar | 3,222 | AS F2 A E BQQE 98890805 |
| NBE 32-160/172 | 0.55 | 0 - 1.6 bar | 3,215 | 99104648 |
| NBE 32-160/173 | 0.75 | 0 - 1.6 bar | 3,308 | 99104650 |
| NBE 32-200.1/196 | 0.55 | 0 - 1.6 bar | 3,317 | 98609256 |
| NBE 32-200.1/207 | 0.75 | 0 - 1.6 bar | 3,423 | 98808680 |
| NBE 32-200/184 | 0.55 | 0 - 1.6 bar | 3,295 | 99104651 |
| NBE 32-200/197 | 0.75 | 0 - 1.6 bar | 3,392 | 99104652 |
| NBE 32-200/216 | 1.1 | 0 - 2.5 bar | 3,498 | 99104673 |
| NBE 32-200/219 | 1.5 | 0 - 2.5 bar | 3,753 | 99105406 |
| NBE 32-250/206 | 0.75 1.1 | 0 - 1.6 bar | 3,616 | 99104674 98920646 |
| NBE 32-250/236 NBE 32-250/260 | 1.5 | 0 - 2.5 bar 0 - 2.5 bar | 3,743 3,988 | 99105408 |
| NBE 32-250/262 | 2.2 | 0 - 2.5 bar | 4,510 | 99105409 |
| | | | | |
| NBE 40-125/142 | 0.55 | 0 - 1.0 bar | 3,371 | 98726811 |
| NBE 40-160/151 | 0.55 | 0 - 1.0 bar | 3,389 | 99104675 |
| NBE 40-160/162 | 0.75 | 0 - 1.0 bar | 3,464 | 99104676 |
| NBE 40-160/177 | 1.1 | 0 - 1.6 bar | 3,616 | 98890794 |
| NBE 40-200/177 | 0.75 | 0 - 1.6 bar | 3,417 | 99104677 |
| NBE 40-200/198 NBE 40-200/217 | 1.1 1.5 | 0 - 1.6 bar | 3,654 3,791 | 99104678 99105410 |
| NBE 40-200/217 NBE 40-200/219 | 2.2 | 0 - 1.6 bar 0 - 2.5 bar | 4,338 | 99105410 |
| NBE 40-250/219 | 1.5 | 0 - 2.5 bar | 3,950 | 99105412 |
| NBE 40-250/245 | 2.2 | 0 - 2.5 bar | 4,521 | 99105413 |
| NBE 40-250/260 | 3 | 0 - 2.5 bar | 4,974 | 99105414 |
| NBE 40-315/283 | 3 | 0 - 4 bar | 5,604 | 99105415 |
| NBE 40-315/305 | 4 | 0 - 4 bar | 6,244 | 99101881 |
| NBE 40-315/334 | 5.5 | 0 - 4 bar | 7,294 | 99101968 |
| NBE 40-315/344 | 7.5 | 0 - 6 bar | 8,053 | 99101969 |
| NDE 50 435 /430 | 0.55 | 0.061 | 2.205 | 2042457 |
| NBE 50-125/129 | 0.55 0.75 | 0 - 0.6 bar | 3,395 | 99104679 |
| NBE 50-125/138 NBE 50-125/144 | 1.1 | 0 - 1.0 bar 0 - 1.0 bar | 3,471 3,577 | 98591318 99031018 |
| NBE 50-160/131 | 0.55 | 0 - 0.6 bar | 3,442 | 98689527 |
| NBE 50-160/139 | 0.75 | 0 - 1.0 bar | 3,524 | 99104680 |
| NBE 50-160/158 | 1.1 | 0 - 1.0 bar | 3,614 | 98773132 |
| NBE 50-160/175 | 1.5 | 0 - 1.6 bar | 3,753 | 99105416 |
| NBE 50-160/177 | 2.2 | 0 - 1.6 bar | 4,228 | 99105417 |
| NBE 50-200/171 | 1.1 | 0 - 1.6 bar | 3,689 | 99104683 |
| NBE 50-200/188 | 1.5 | 0 - 1.6 bar | 3,857 | 99105418 |
| NBE 50-200/210 | 2.2 | 0 - 1.6 bar | 4,292 | 99105419 |
| NBE 50-200/219 | 3 | 0 - 2.5 bar | 4,772 | 99105420 |
| NBE 50-250/221 | 2.2 | 0 - 2.5 bar | 4,446 | 99105421 |
| NBE 50-250/241 | 3 | 0 - 2.5 bar | 4,918 | 99105422 |
| NBE 50-250/263 | 4 | 0 - 2.5 bar | 5,529 | 99101875 |
| NBE 50-315/277 | 4 | 0 - 4 bar | 6,269 | 99101970 |
| NBE 50-315/303 | 5.5 7.5 | 0 - 4 bar | 7,439 | 99101971 99101873 |
| NBE 50-315/331 NBE 50-315/344 | 11 | 0 - 6 bar 0 - 6 bar | 8,582 10,643 | 98976085 |
| | | | 20/2 12 | |
| NBE 65-125/122 | 0.55 | 0 - 0.6 bar | 3,405 | 98941572 |
| NBE 65-125/130 | 0.75 | 0 - 0.6 bar | 3,508 | 99104682 |
| NBE 65-125/144 | 1.1 | 0 - 1.0 bar | 3,646 | 98956877 |
| NBE 65-160/135 | 0.75 | 0 - 1.0 bar | 3,490 | 98920991 |
| NBE 65-160/149 | 1.1 | 0 - 1.0 bar | 3,607 | 99104683 |
| NBE 65-160/165 | 1.5 | 0 - 1.0 bar | 3,740 | 99105433 |
| NBE 65-160/177 NBE 65-200/170 | 2.2 | 0 - 1.6 bar | 4,247 | 99105434 |
| NBE 65-200/170 NBE 65-200/189 | 1.5 2.2 | 0 - 1.6 bar 0 - 1.6 bar | 4,112 4,557 | 9910543 9916637 |
| NBE 65-200/205 | 3 | 0 - 1.6 bar | 5,042 | 9910543 |
| NBE 65-200/219 | 4 | 0 - 2.5 bar | 5,723 | 9910175 |
| NBE 65-250/215 | 3 | 0 - 2.5 bar | 5,496 | 99105438 |
| NBE 65-250/232 | 4 | 0 - 2.5 bar | 6,162 | 99101777 |
| NBE 65-250/254 | 5.5 | 0 - 2.5 bar | 7,319 | 99101619 |
| NBE 65-250/270 | 7.5 | 0 - 4 bar | 8,428 | 99101900 |
| NBE 65-315/261 | 5.5 | 0 - 2.5 bar | 7,563 | 99101972 |
| NBE 65-315/282 | 7.5 | 0 - 4 bar | 8,579 | 99101770 |
| NBE 65-315/314 | 11 | 0 - 4 bar | 10,979 | 98666285 |
| NBE 65-315/320 | 15 | 0 - 4 bar | 12,327 | 98976086 |
| | | | | |

SUPPORT BLOCKS

Pumps listed in the darker shaded area include Support Blocks



COMPLETE WITH 1450 RPM (4 POLES) 3 PHASE VARIABLE SPEED MOTOR

| | | | | 380-480/500V 3ph 50/60Hz |
|---------------------|------|-----------------------|--------|--------------------------|
| | | | | £ Product code |
| | P2 | Differential pressure | | A F2 A E BQQE |
| Model | kW | transducer range | | AS F2 A E BQQE |
| NBE 80-160/146 | 1.5 | 0 - 1.0 bar | 4,031 | 99105439 |
| NBE 80-160/161 | 2.2 | 0 - 1.0 bar | 4,537 | 99105440 |
| NBE 80-160/175 | 3 | 0 - 1.6 bar | 4,999 | 99105441 |
| NBE 80-160/177 | 4 | 0 - 1.6 bar | 5,618 | 99101751 |
| NBE 80-200/164 | 2.2 | 0 - 1.0 bar | 5,029 | 99105442 |
| NBE 80-200/179 | 3 | 0 - 1.6 bar | 5,496 | 99105443 |
| NBE 80-200/196 | 4 | 0 - 1.6 bar | 6,130 | 99101959 |
| NBE 80-200/214 | 5.5 | 0 - 2.5 bar | 7,183 | 99101768 |
| NBE 80-200/222 | 7.5 | 0 - 2.5 bar | 8,282 | 99100109 |
| NBE 80-250/225 | 5.5 | 0 - 2.5 bar | 7,491 | 99101771 |
| NBE 80-250/247 | 7.5 | 0 - 2.5 bar | 8,574 | 99100061 |
| NBE 80-250/270 | 11 | 0 - 4 bar | 10,869 | 98692711 |
| NBE 80-315/280 | 11 | 0 - 4 bar | 11,250 | 98976087 |
| NBE 80-315/305 | 15 | 0 - 4 bar | 12,515 | 98976055 |
| NBE 80-315/320 | 18.5 | 0 - 4 bar | 14,143 | 99150846 |
| NBE 80-400/347 | 18.5 | 0 - 6 bar | 16,460 | 99105337 |
| | | | · | |
| NBE 100-160/160-140 | 2.2 | 0 - 1.0 bar | 4,834 | 99105444 |
| NBE 100-160/169 | 3 | 0 - 1.0 bar | 5,306 | 99105445 |
| NBE 100-160/176 | 4 | 0 - 1.0 bar | 5,936 | 99101913 |
| NBE 100-200/178 | 4 | 0 - 1.6 bar | 6,273 | 99105447 |
| NBE 100-200/195 | 5.5 | 0 - 1.6 bar | 7,298 | 99105448 |
| NBE 100-200/211 | 7.5 | 0 - 2.5 bar | 8,431 | 99105449 |
| NBE 100-200/219 | 11 | 0 - 2.5 bar | 10,352 | 98976088 |
| NBE 100-250/215 | 7.5 | 0 - 2.5 bar | 9,153 | 99101910 |
| NBE 100-250/245 | 11 | 0 - 2.5 bar | 11,230 | 98976180 |
| NBE 100-250/274 | 15 | 0 - 4 bar | 12,483 | 98976179 |
| NBE 100-315/279 | 15 | 0 - 4 bar | 12,811 | 98976089 |
| NBE 100-315/295 | 18.5 | 0 - 4 bar | 14,370 | 99105338 |
| | | | , | |
| NBE 125-200/176-154 | 5.5 | 0 - 1.0 bar | 8,080 | 99101912 |
| NBE 125-200/196-180 | 7.5 | 0 - 1.6 bar | 9,096 | 99101911 |
| NBE 125-200/219 | 11 | 0 - 2.5 bar | 11,203 | 98976193 |
| NBE 125-200/226 | 15 | 0 - 2.5 bar | 12,445 | 98976192 |
| NBE 125-250/220 | 11 | 0 - 2.5 bar | 11,467 | 98976090 |
| NBE 125-250/236 | 15 | 0 - 2.5 bar | 12,703 | 98349835 |
| NBE 125-250/249 | 18.5 | 0 - 2.5 bar | 14,310 | 98349876 |
| NBE 125-315/275 | 18.5 | 0 - 4 bar | 16,061 | 99042637 |
| · | | | , | A F1 A E BQQE |
| | | | | AS F1 A E BQQE |
| NBE 150-200/210-158 | 7.5 | 0 - 1.0 bar | 10,096 | 99157328 |
| NBE 150-200/218-208 | 11 | 0 - 1.6 bar | 12,497 | 98976056 |
| NBE 150-200/224 | 15 | 0 - 1.6 bar | 13,746 | 98762436 |
| NBE 150-250/226-214 | 15 | 0 - 1.6 bar | 14,326 | 98976196 |
| NBE 150-250/230 | 18.5 | 0 - 2.5 bar | 15,993 | 99105340 |
| | | | | 3323340 |

ELECTRIC MOTOR

380-500V 3ph 50/60Hz up to 7.5kW with IE5 efficiency 380-480V 3ph 50/60Hz above 11kW IP 55 Class F Insulation

SUPPORT BLOCKS

Pumps listed in the darker shaded area include Support Blocks

Pumps with Custom Built options such as different material impellers and non standard seals can be configured and priced on request by your Sales Office. Pump housings are flanged in accordance with EN1092-2 and EN733 standards.

COUNTER FLANGES

Pump Counter Flanges are supplied as optional extras and are indicated on page 22.

NBE OPERATION

These models have been designed for operation in either open or closed loop control arrangements.

The Default control mode is "Uncontrolled Curve / Constant curve".

NBE pumps do not include transducers for closed loop control.

Transducers can be supplied as separate items for pipework installations.

Single point pressure transducers are listed with their ranges on page 22.

The transducer ranges listed for the NBE pumps only cover the max closed valve pressure with no inlet head. Please check the inlet head to check if the transducer size needs to be increased.

There is no sensor connection point on the NBE pump and connections need to be made in the pipework.

IMPORTANT

A Grundfos GO based communication device will be required in order to commission the "E" product. See page 22 for details. This device can be used to commission and monitor multiple pumps on multiple sites.



COMPLETE WITH 2 POLES / 2900 RPM IE3 MOTORS

| COMM LETE WIT | II Z I OLLO / | 200 11 11 123 14 | |
|------------------|---------------|-------------------|--------------|
| | P2 | 380-415V £ | Product Code |
| Madal | | | |
| Model | kW | A2 F A E 3,543 | |
| NK 32-125.1/100 | 0.75 | | 98973375 |
| NK 32-125.1/110 | 1.1 | 3,589 | 98973377 |
| NK 32-125.1/121 | 1.5 | 3,697 | 98973379 |
| NK 32-125.1/140 | 2.2 | 3,760 | 98973381 |
| NK 32-125/106 | 1.1 | 3,641 | 98973383 |
| NK 32-125/115 | 1.5 | 3,749 | 98973385 |
| NK 32-125/130 | 2.2 | 3,808 | 98973388 |
| NK 32-125/142 | 3 | 4,068 | 98973391 |
| | | | |
| NK 32-160.1/139 | 1.5 | 3,835 | 98973393 |
| NK 32-160.1/155 | 2.2 | 3,892 | 98973395 |
| NK 32-160.1/169 | 3 | 4,155 | 98973397 |
| NK 32-160.1/177 | 4 | 4,392 | 98973401 |
| NK 32-160/139 | 2.2 | 3,959 | 98973403 |
| NK 32-160/151 | 3 | 4,228 | 98973405 |
| NK 32-160/163 | 4 | 4,465 | 98973407 |
| NK 32-160/177 | 5.5 | 4,796 | 98973410 |
| | | | |
| NK 32-200.1/172 | 3 | 4,249 | 98973422 |
| NK 32-200.1/188 | 4 | 4,488 | 98973424 |
| NK 32-200.1/205 | 5.5 | 4,815 | 98973426 |
| NK 32-200.1/207 | 7.5 | 5,131 | 98973429 |
| NK 32-200/176 | 4 | 4,514 | 98973430 |
| NK 32-200/190 | 5.5 | 4,856 | 98869755 |
| NK 32-200/206 | 7.5 | 5,164 | 98408593 |
| NK 32-200/219 | 11 | 5,968 | 98663381 |
| 111. 52 200, 213 | | -,,,,, | 5000002 |
| NK 32-250/199 | 5.5 | 5,372 | 98973438 |
| NK 32-250/219 | 7.5 | 5,694 | 98973431 |
| NK 32-250/213 | 11 | 6,540 | 98973434 |
| NK 32-250/262 | 15 | 7,263 | 98973444 |
| 14K 32 230/202 | 13 | 7,200 | 30373444 |
| NK 40-125/105 | 1.5 | 3,714 | 98973447 |
| NK 40-125/116 | 2.2 | 3,775 | 98973450 |
| NK 40-125/127 | 3 | 4,021 | 98553113 |
| | 4 | 4,259 | |
| NK 40-125/139 | | 4,586 | 98973452 |
| NK 40-125/142 | 5.5 | 4,300 | 98973454 |
| NIV 40 100/144 | 4 | 4 306 | 00072456 |
| NK 40-160/144 | 4 | 4,396 | 98973456 |
| NK 40-160/158 | 5.5 | 4,723 | 98973458 |
| NK 40-160/172 | 7.5 | 5,024 | 98973436 |
| NK 40-160/177 | 11 | 5,806 | 98431476 |
| NUL 40 005 1:== | | 4 | |
| NK 40-200/172 | 5.5 | 4,859 | 98545685 |
| NK 40-200/188 | 7.5 | 5,149 | 98973439 |
| NK 40-200/206 | 11 | 5,938 | 98973441 |
| NK 40-200/219 | 15 | 6,609 | 98973466 |
| | | | |
| NK 40-250/211 | 11 | 6,457 | 98973442 |
| NK 40-250/230 | 15 | 7,154 | 98052630 |
| NK 40-250/245 | 18.5 | 7,468 | 98973445 |
| NK 40-250/255 | 22 | 8,590 | 98257988 |
| NK 40-250/260 | 30 | 10,398 | 98972741 |
| | | | |
| NK 40-315/273 | 22 | 9,272 | 98973446 |
| NK 40-315/298 | 30 | 11,094 | 98972745 |
| NK 40-315/318 | 37 | 12,173 | 98972748 |
| NK 40-315/336 | 45 | 15,417 | 98972750 |
| | | * | |

ELECTRIC MOTOR

Motors up to and including 3kW are 220-240D/380-415Y V/3ph/50Hz Motors 4kW and above are 380-415D V/3ph/50Hz IP 55 Class F Insulation

All 2 poles motors up to and including 22kW are Grundfos IE3 efficiency standard. All 2 poles motors above and including 30kW are Siemens IE3 efficiency standard.

PUMPS

Standard NK casing and impeller are cast iron.

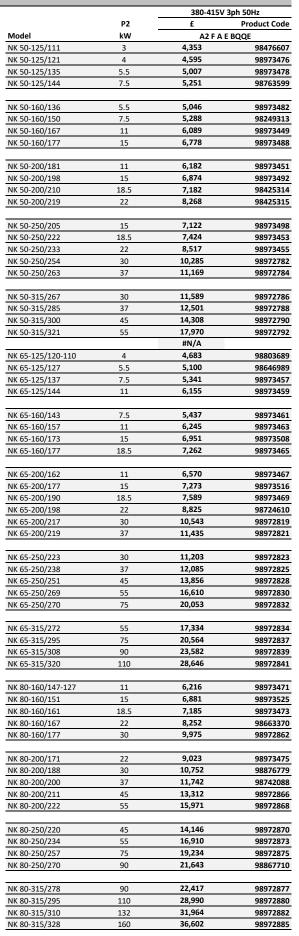
All long-coupled NK pumps have spacer coupling and base frame.

Pumps with Custom Built options such as different material impellers, casings and non-standard seals can be configured and priced on request by your Sales Office.

Pump housings are flanged in accordance with EN1092-2 and EN733 design standards.

COUNTER FLANGES

Pump Counter Flanges are supplied as optional extras and are indicated on page 22





COMPLETE WITH 2 POLES / 2900 RPM IE3 MOTORS

| | | 380-415V 3ph 50Hz | |
|--------------------|------|-------------------|--------------|
| | P2 | £ | Product Code |
| Model | kW | A2 F A | E BQQE |
| NK 100-160/160-154 | 18.5 | 7,568 | 98973728 |
| NK 100-160/167 | 22 | 8,670 | 98973726 |
| NK 100-160/176 | 30 | 10,437 | 98973337 |
| | | | |
| NK 100-200/170 | 30 | 11,479 | 98972887 |
| NK 100-200/181 | 37 | 12,362 | 98833673 |
| NK 100-200/192 | 45 | 14,154 | 98972889 |
| NK 100-200/203 | 55 | 16,926 | 98606358 |
| NK 100-200/219 | 75 | 19,250 | 98698076 |
| | | | |
| NK 100-250/205 | 55 | 17,216 | 98973187 |
| NK 100-250/229 | 75 | 19,527 | 98973185 |
| NK 100-250/242 | 90 | 21,934 | 98973183 |
| NK 100-250/258 | 110 | 29,700 | 98973181 |
| NK 100-250/269 | 132 | 32,997 | 98973179 |
| | | | |
| NK 100-315/269 | 110 | 31,544 | 98829703 |
| NK 100-315/284 | 132 | 33,060 | 98972891 |
| NK 100-315/301 | 160 | 37,926 | 98972893 |
| NK 100-315/322 | 200 | 43,923 | 98972895 |

| ELEC | TRIC | : MO | TOR |
|------|------|------|-----|
| | | | |

Motors 4kW and above are 380-415D V/3ph/50Hz IP 55 Class F Insulation

All 2 poles motors up to and including 22kW are Grundfos IE3 efficiency standard. All 2 poles motors above and including 30kW are Siemens IE3 efficiency standard.

Standard NK casing and impeller are cast iron.

All long-coupled NK pumps have spacer coupling and base frame.

Pumps with Custom Built options such as different material impellers, casings and non-standard seals can be configured and priced on request by your Sales Office.

Pump housings are flanged in accordance with EN1092-2 and EN733 design standards.

COUNTER FLANGES

Pump Counter Flanges are supplied as optional extras and are indicated on page 22.

| | | 380-415V 3ph 50Hz | |
|--------------------|-----|-------------------|--------------|
| | P2 | £ | Product Code |
| Model | kW | A2 F A E BQQE | |
| NK 125-200/176-154 | 45 | 14,908 | 98973262 |
| NK 125-200/196-166 | 55 | 17,678 | 98973260 |
| NK 125-200/205 | 75 | 20,644 | 98973258 |
| NK 125-200/219 | 90 | 22,930 | 98973257 |
| NK 125-200/224 | 110 | 30,539 | 98973255 |
| | | | |
| NK 125-250/222 | 90 | 23,484 | 98972898 |
| NK 125-250/236 | 110 | 30,404 | 98972900 |
| NK 125-250/249 | 132 | 32,654 | 98684463 |
| NK 125-250/263 | 160 | 37,414 | 98972902 |
| NK 125-250/269 | 200 | 43,436 | 98972904 |
| | | | |
| NK 125-315/262 | 132 | 34,363 | 98972906 |
| NK 125-315/277 | 160 | 39,091 | 98972908 |
| NK 125-315/297 | 200 | 45,111 | 98972910 |
| NK 125-315/317 | 250 | 66,663 | 98444952 |
| | | | |
| NK 150-200/216-176 | 75 | 22,529 | 98767265 |
| NK 150-200/218-202 | 90 | 24,810 | 98972912 |
| NK 150-200/224 | 110 | 32,424 | 98972914 |
| | | | |
| NK 150-250/226-220 | 132 | 37,630 | 98973304 |
| NK 150-250/235 | 160 | 42,378 | 98973302 |
| NK 150-250/250 | 200 | 48,538 | 98973300 |
| NK 150-250/265 | 250 | POA | 98973298 |
| | | | |
| NK 150-315.2/244 | 160 | 45,120 | 99001704 |
| NK 150-315.2/262 | 200 | 49,212 | 99001705 |





| | | 380-415V 3ph 50Hz | |
|-----------------|----------|-------------------|--------------|
| | P2 kW | £ | Product Code |
| Model | | A2 F A E BQQE | |
| NK 32-125.1/121 | 0.25 | 3,270 | 98986192 |
| NK 32-125.1/139 | 0.25 | 3,270 | 98986194 |
| NK 32-125.1/140 | 0.37 | 3,297 | 98986196 |
| NK 32-125/115 | 0.25 | 3,322 | 98986218 |
| NIV 22 12E/120 | 0.25 | 2 222 | 00006337 |

COMPLETE WITH 4 POLES / 1450 RPM IE3 MOTORS

| NK 32-125.1/121 | 0.25 | 3,270 | 98986192 |
|-----------------|------|-------|----------|
| NK 32-125.1/139 | 0.25 | 3,270 | 98986194 |
| NK 32-125.1/140 | 0.37 | 3,297 | 98986196 |
| NK 32-125/115 | 0.25 | 3,322 | 98986218 |
| NK 32-125/130 | 0.25 | 3,322 | 98986237 |
| NK 32-125/142 | 0.37 | 3,349 | 98986239 |
| | | | |
| NK 32-160.1/137 | 0.25 | 3,421 | 98986241 |
| NK 32-160.1/155 | 0.25 | 3,421 | 98986245 |
| NK 32-160.1/172 | 0.37 | 3,449 | 98986247 |
| NK 32-160.1/177 | 0.55 | 3,616 | 98986249 |
| NK 32-160/138 | 0.25 | 3,484 | 98986250 |
| NK 32-160/154 | 0.37 | 3,511 | 98986301 |
| NK 32-160/172 | 0.55 | 3,683 | 98986345 |
| NK 32-160/173 | 0.75 | 3,699 | 98973535 |
| | | | |
| NK 32-200.1/175 | 0.37 | 3,543 | 98986346 |
| NK 32-200.1/196 | 0.55 | 3,718 | 98986348 |
| NK 32-200.1/207 | 0.75 | 3,734 | 98973557 |
| NK 32-200/184 | 0.55 | 3,744 | 98986349 |
| NK 32-200/197 | 0.75 | 3,762 | 98973559 |
| NK 32-200/216 | 1.1 | 3,842 | 98973561 |
| NK 32-200/219 | 1.5 | 3,900 | 98973563 |
| | | | |
| NK 32-250/206 | 0.75 | 4,235 | 98973537 |
| NK 32-250/236 | 1.1 | 4,316 | 98973539 |
| NK 32-250/260 | 1.5 | 4,376 | 98973553 |
| NK 32-250/262 | 2.2 | 4,536 | 98973555 |
| | | | |
| NK 40-125/116 | 0.25 | 3,299 | 98986475 |
| NK 40-125/130 | 0.37 | 3,325 | 98986476 |
| NK 40-125/142 | 0.55 | 3,500 | 98986477 |
| | | | |
| NK 40-160/134 | 0.37 | 3,468 | 98986502 |
| NK 40-160/151 | 0.55 | 3,637 | 98986504 |
| NK 40-160/162 | 0.75 | 3,653 | 98973565 |
| NK 40-160/177 | 1.1 | 3,734 | 98973567 |
| | | | |
| NK 40-200/177 | 0.75 | 3,780 | 98973569 |
| NK 40-200/198 | 1.1 | 3,862 | 98973572 |
| NK 40-200/217 | 1.5 | 3,920 | 98973575 |
| NK 40-200/219 | 2.2 | 4,077 | 98973578 |
| | | | |
| NK 40-250/219 | 1.5 | 4,342 | 98973581 |
| NK 40-250/245 | 2.2 | 4 506 | 09072592 |

| NK 40-250/219 | 1.5 | 4,342 | 98973581 |
|---------------|------|-------|----------|
| NK 40-250/245 | 2.2 | 4,506 | 98973583 |
| NK 40-250/260 | 3 | 4,665 | 98973585 |
| | | | |
| NK 40-315/283 | 3 | 5,410 | 98973587 |
| NK 40-315/305 | 4 | 5,675 | 98973477 |
| NK 40-315/334 | 5.5 | 6,351 | 98973479 |
| NK 40-315/344 | 7.5 | 6,770 | 98973481 |
| | • | | |
| NK 50-125/113 | 0.37 | 3,623 | 98986501 |

3,806

98990816

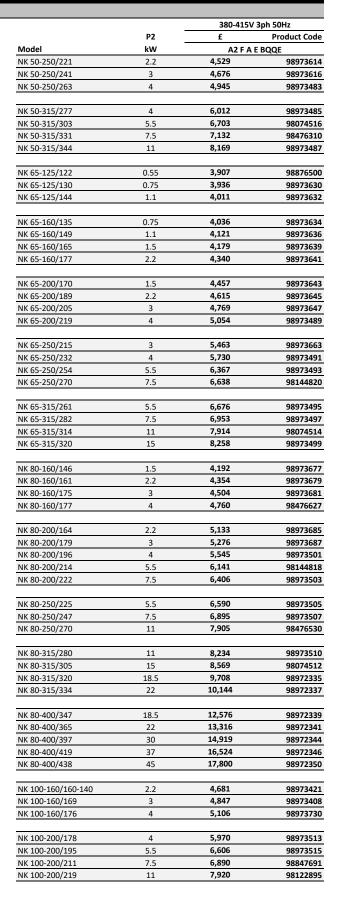
| NK 50-125/138 | 0.75 | 3,822 | 98973596 |
|---------------|------|-------|----------|
| NK 50-125/144 | 1.1 | 3,905 | 98973598 |
| | | | |
| NK 50-160/131 | 0.55 | 3,871 | 98990819 |
| NK 50-160/139 | 0.75 | 3,887 | 98973600 |
| NK 50-160/158 | 1.1 | 3,960 | 98973603 |
| NK 50-160/175 | 1.5 | 4,020 | 98705749 |
| NK 50-160/177 | 2.2 | 4,187 | 98973606 |

0.55

NK 50-125/129

| NK 50-200/171 | 1.1 | 4,068 | 98973608 |
|---------------|-----|-------|----------|
| NK 50-200/188 | 1.5 | 4,120 | 98973610 |
| NK 50-200/210 | 2.2 | 4,282 | 98545683 |
| NK 50-200/219 | 3 | 4,432 | 98973612 |
| | | | |

Motor specification, reference to accessories and operational details are on page 16.





COMPLETE WITH 4 POLES / 1450 RPM IE3 MOTORS

| | | 380-415V 3ph 50Hz | |
|--|----------|-------------------|----------------------|
| | P2 | £ | Product Code |
| Model | kW | A2 F A I | E BQQE |
| NK 100-250/215 | 7.5 | 7,161 | 98973704 |
| NK 100-250/245 | 11 | 8,189 | 98973702 |
| NK 100-250/274 | 15 | 8,548 | 98973690 |
| NK 100-315/279 | 15 | 9,247 | 98973517 |
| NK 100-315/295 | 18.5 | 10,390 | 98972358 |
| NK 100-315/312 | 22 | 10,820 | 98972360 |
| NK 100-315/334 | 30 | 12,390 | 98607734 |
| NK 100 400/224 | 22 | 13,645 | 09072241 |
| NK 100-400/334 NK 100-400/360 | | 15,250 | 98973241 |
| NK 100-400/360 NK 100-400/375 | 30 37 | 16,846 | 98973240 98973239 |
| NK 100-400/375 | 45 | 18,119 | 98973238 |
| NK 100-400/393 | 55 | 20,770 | 98973236 |
| NK 100-400/415 | 33 | 20,770 | 363/3230 |
| NK 125-200/176-154 | 5.5 | 7,394 | 98973713 |
| NK 125-200/196-180 | 7.5 | 7,667 | 98973711 |
| NK 125-200/219 | 11 | 8,716 | 98973710 |
| NK 125-200/226 | 15 | 9,058 | 98973708 |
| NK 125-250/220 | 11 | 8,572 | 98973519 |
| NK 125-250/236 | 15 | 8,902 | 98663368 |
| NK 125-250/249 | 18.5 | 10,040 | 98731075 |
| NK 125-250/262 | 22 | 10,482 | 98476605 |
| NK 125-250/269 | 30 | 12,041 | 98663363 |
| NV 125-215/275 | 18.5 | 12,563 | 98972366 |
| NK 125-315/275 NK 125-315/290 | 22 | 12,909 | 98780297 |
| NK 125-315/317 | 30 | 14,518 | 98972368 |
| NK 125-315/336 | 37 | 16,118 | 98972370 |
| NK 125-315/338 | 45 | 17,395 | 98972372 |
| NK 123-313/330 | 43 | 17,555 | 30372372 |
| NK 125-400/345 | 37 | 16,942 | 98972374 |
| NK 125-400/368 | 45 | 18,209 | 98972376 |
| NK 125-400/392 | 55 | 20,859 | 98972378 |
| NK 125-400/433 | 75 | 23,791 | 98424188 |
| NK 125-400/438 | 90 | 26,168 | 98972380 |
| NK 125-500/406 | 55 | 24,557 | 98972382 |
| NK 125-500/447 | 75 | 27,642 | 98972384 |
| NK 125-500/473 | 90 | 30,140 | 98972386 |
| NK 125-500/500 | 110 | 38,988 | 98972389 |
| NK 125-500/526 | 132 | 40,021 | 98531708 |
| NK 125-500/548 | 160 | 42,644 | 98972391 |
| NK 150-200/210-159 | 7.5 | 8 802 | 00072521 |
| NK 150-200/210-158 NK 150-200/218-208 | 7.5 | 8,892 10,430 | 98973521 98244644 |
| NK 150-200/218-208 | 15 | 10,783 | 98780294 |
| | | | 10.00254 |
| NK 150-250/226-214 | 15 | 11,728 | 98918826 |
| NK 150-250/230 | 18.5 | 12,784 | 98930113 |
| NK 150-250/242 | 22 | 13,316 | 98964693 |
| NK 150-250/262 | 30 | 14,836 | 98973311 |
| NK 150-250/275 | 37 | 16,782 | 98973308 |
| NK 150-250/282 | 45 | 18,087 | 98973306 |

ELECTRIC MOTOR

Motors up to and including 3kW are 220-240D/380-415Y V/3ph/50Hz Motors 4kW and above are 380-415D V/3ph/50Hz

IP 55 Class F Insulation

All motors up to and including 0.55kW have no efficiency standard
All 4 poles motors up to and including 15kW are Grundfos IE3 efficiency standard.
All 4 poles motors above and including 18.5kW are Siemens IE3 efficiency standard.

PUMPS

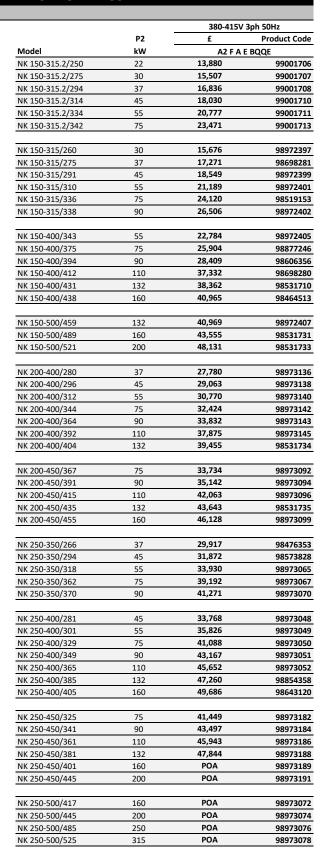
Standard NK casing and impeller are cast iron.

All long-coupled NK pumps have spacer coupling and base frame.

Pumps with Custom Built options such as different material impellers, casings and non-standard seals can be configured and priced on request by your Sales Office. Pump housings are flanged in accordance with EN1092-2 and EN733 design standards.

COUNTER FLANGES

Pump Counter Flanges are supplied as optional extras and are indicated on page 22.





COMPLETE WITH 6 POLES / 960 RPM IE3 MOTORS

| | | 380-415V 3ph 50Hz | | |
|--------------------|------|-------------------|---------------|--|
| | P2 | £ | Product Code | |
| Model | kW | A2 F A E | BQQE | |
| | | | | |
| NK 100-160/169 | 0.75 | 5,283 | 98973351 | |
| NK 100-160/176 | 1.1 | 5,371 | 98973349 | |
| | | | | |
| NK 100-200/182 | 1.1 | 6,175 | 98972409 | |
| NK 100-200/193 | 1.5 | 6,332 | 98972410 | |
| NK 100-200/214 | 2.2 | 6,532 | 98972412 | |
| NK 100-200/219 | 3 | 7,197 | 98972414 | |
| NK 100-250/216 | 2.2 | 6,850 | 98973202 | |
| NK 100-250/216 | 3 | 7,494 | 98973200 | |
| NK 100-250/260 | 4 | 7,522 | 98973198 | |
| NK 100-250/274 | 5.5 | 8,279 | 98973196 | |
| 1111 200 200/27 1 | 5.5 | 3,273 | 30370230 | |
| NK 100-315/272 | 4 | 8,304 | 98972416 | |
| NK 100-315/301 | 5.5 | 9,000 | 98972418 | |
| NK 100-315/326 | 7.5 | 9,690 | 98972420 | |
| NK 100-315/334 | 11 | 10,974 | 98972422 | |
| | | | | |
| NK 100-400/340 | 7.5 | 12,030 | 98973244 | |
| NK 100-400/380 | 11 | 13,294 | 98973243 | |
| NK 100-400/415 | 15 | 14,410 | 98973242 | |
| | | | | |
| NK 125-200/176-150 | 1.5 | 7,201 | 98973281 | |
| NK 125-200/196-182 | 2.2 | 7,423 | 98973270 | |
| NK 125-200/215 | 3 | 8,064 | 98973269 | |
| NK 125-200/226 | 4 | 8,112 | 98973268 | |
| | | | | |
| NK 125-250/216 | 3 | 7,986 | 98972424 | |
| NK 125-250/232 | 4 | 8,002 | 98972426 | |
| NK 125-250/253 | 5.5 | 8,712 | 98972428 | |
| NK 125-250/269 | 7.5 | 9,343 | 98972429 | |
| NK 125-315/275 | 5.5 | 10,637 | 98972431 | |
| NK 125-315/297 | 7.5 | 11,275 | 98972433 | |
| NK 125-315/335 | 11 | 12,572 | 98972435 | |
| NK 125-315/338 | 15 | 13,688 | 98972437 | |
| | | | 0001 = 101 | |
| NK 125-400/351 | 11 | 13,673 | 98972439 | |
| NK 125-400/384 | 15 | 14,790 | 98972441 | |
| NK 125-400/410 | 18.5 | 15,985 | 98972443 | |
| NK 125-400/434 | 22 | 16,942 | 98972444 | |
| NK 125-400/438 | 30 | 18,085 | 98990844 | |
| | | | | |
| NK 125-500/421 | 18.5 | 19,086 | 98972448 | |
| NK 125-500/445 | 22 | 20,073 | 98972450 | |
| NK 125-500/493 | 30 | 21,266 | 98972452 | |
| NK 125-500/524 | 37 | 22,787 | 98972458 | |
| NK 125-500/546 | 45 | 24,673 | 98972454 | |
| NK 125-500/548 | 55 | 26,193 | 98990845 | |
| NW 450 200/240 460 | | 0.750 | 20072452 | |
| NK 150-200/210-168 | 2.2 | 8,752 | 98972460 | |
| NK 150-200/218-200 | 3 | 9,381 | 98972462 | |
| NK 150-200/224 | 4 | 9,406 | 98972464 | |
| NK 150-250/235 | 5.5 | 11,163 | 98973318 | |
| NK 150-250/252 | 7.5 | 11,822 | 98973316 | |
| NK 150-250/282 | 11.0 | 13,160 | 98973314 | |
| 1411 130 230/202 | 11.0 | 15,100 | 30373314 | |
| NK 150-315.2/259 | 7.5 | 13,683 | 99001714 | |
| NK 150-315.2/293 | 11.0 | 14,986 | 99001715 | |
| NK 150-315.2/328 | 15.0 | 15,176 | 99001716 | |
| NK 150-315.2/342 | 18.5 | 17,176 | 99001717 | |
| NK 150-315/280 | 11.0 | 15,055 | 98972465 | |
| NK 150-315/305 | 15.0 | 16,138 | 98972467 | |
| NK 150-315/322 | 18.5 | 17,261 | 98972469 | |
| NK 150-315/337 | 22.0 | 18,219 | 98737868 | |
| NK 150-315/338 | 30.0 | 19,432 | 98972471 | |
| | · | | _ | |

COUNTER FLANGES

Pump Counter Flanges are supplied as optional extras and are indicated on page 22.

| | | 380-415V | 3ph 50Hz |
|----------------|------|---------------------------------------|--------------|
| | P2 | £ | Product Code |
| Model | kW | A2 F A E | BQQE |
| NK 150-400/357 | 18.5 | 18,943 | 98972473 |
| NK 150-400/375 | 22 | 19,936 | 98972475 |
| NK 150-400/408 | 30 | 21,210 | 98972478 |
| NK 150-400/430 | 37 | 22,742 | 98972480 |
| NK 150-400/438 | 45 | 24,641 | 98972482 |
| | | | |
| NK 150-500/457 | 37 | 25,202 | 98972484 |
| NK 150-500/483 | 45 | 27,088 | 98972486 |
| NK 150-500/513 | 55 | 28,607 | 98972488 |
| NK 150-500/548 | 75 | 30,651 | 98972490 |
| | | | |
| NK 200-400/308 | 15 | 23,592 | 98973148 |
| NK 200-400/328 | 18.5 | 24,665 | 98973150 |
| NK 200-400/348 | 22 | 26,382 | 98973153 |
| NK 200-400/384 | 30 | 28,008 | 98973154 |
| NK 200-400/404 | 37 | 30,028 | 98973156 |
| | | | |
| NK 200-450/355 | 18.5 | 25,338 | 98973101 |
| NK 200-450/371 | 22 | 27,376 | 98973103 |
| NK 200-450/407 | 30 | 29,320 | 98973106 |
| NK 200-450/431 | 37 | 31,340 | 98973108 |
| NK 200-450/451 | 45 | 33,362 | 98973110 |
| | | | |
| NK 250-350/277 | 11 | 24,784 | 98476332 |
| NK 250-350/306 | 15 | 26,630 | 98973091 |
| NK 250-350/330 | 18.5 | 28,041 | 98973093 |
| NK 250-350/366 | 22 | 29,456 | 98973095 |
| | | | |
| NK 250-400/289 | 15 | 26,897 | 98973053 |
| NK 250-400/313 | 18.5 | 28,307 | 98973054 |
| NK 250-400/329 | 22 | 29,723 | 98973055 |
| NK 250-400/361 | 30 | 32,679 | 98973056 |
| NK 250-400/381 | 37 | 34,407 | 98973057 |
| NK 250-400/401 | 45 | 35,807 | 98973058 |
| | | | |
| NK 250-450/313 | 18.5 | 28,900 | 98973193 |
| NK 250-450/325 | 22 | 30,298 | 98973195 |
| NK 250-450/357 | 30 | 33,203 | 98973197 |
| NK 250-450/377 | 37 | 34,902 | 98973199 |
| NK 250-450/397 | 45 | 36,284 | 98973201 |
| NK 250-450/433 | 55 | 37,981 | 98973203 |
| | | | |
| NK 250-500/409 | 45 | 41,170 | 98973097 |
| NK 250-500/437 | 55 | 43,188 | 98973098 |
| NK 250-500/485 | 75 | 49,792 | 98973100 |
| NK 250-500/525 | 90 | POA | 98973102 |
| | | · · · · · · · · · · · · · · · · · · · | |

ELECTRIC MOTOR

Motors up to and including 3kW are 3 x 220-240D/380-420Y V/3ph/50Hz Motors 4kW and above are 380-420D V/3ph/50Hz IP 55 Class F Insulation

All motors up to and including 0.55kW have no efficiency standard All 6 poles motors above and including 0.75kW are Siemens IE3 efficiency standard.

PUMPS

Standard NK casing and impeller are cast iron.

All long-coupled NK pumps have spacer coupling and base frame.

Pumps with Custom Built options such as different material impellers, casings and non-standard seals can be configured and priced on request by your Sales Office.

Pump housings are flanged in accordance with EN1092-2 and EN733 design standards.



COMPLETE WITH 2900 RPM (2 POLES) 3 PHASE VARIABLE SPEED MOTOR

| COMPLETE WITH 2900 | KPIVI (2 POLES) 3 PHAS | SE VARIABLE SPEED MOTOR | 390 490/5000 | 2nh E0/60Uz | |
|--------------------|------------------------|--------------------------|-----------------|--|--|
| | P2 | Differential pressure | | 380-480/500V 3ph 50/60Hz £ Product code | |
| Model | kW | transducer range | A2 F A E | | |
| NKE 32-125.1/110 | 1.1 | 0 - 2.5 bar | 5,055 | 98987155 | |
| NKE 32-125.1/121 | 1.5 | 0 - 2.5 bar | 5,249 | 98990856 | |
| NKE 32-125.1/140 | 2.2 | 0 - 4 bar | 5,627 | 98990857 | |
| NKE 32-125/106 | 1.1 | 0 - 1.6 bar | 5,105 | 98990858 | |
| NKE 32-125/115 | 1.5 | 0 - 2.5 bar | 5,299 | 98990859 | |
| NKE 32-125/130 | 2.2 | 0 - 2.5 bar | 5,674 | 98990860 | |
| NKE 32-125/142 | 3 | 0 - 4 bar | 6,253 | 99105881 | |
| NKE 32-160.1/139 | 1.5 | 0 - 2.5 bar | 5,383 | 98990862 | |
| NKE 32-160.1/155 | 2.2 | 0 - 4 bar | 5,755 | 98990863 | |
| NKE 32-160.1/169 | 3 | 0 - 4 bar | 6,337 | 99106228 | |
| NKE 32-160.1/177 | 4 | 0 - 6 bar | 6,888 | 99106230 | |
| NKE 32-160/139 | 2.2 | 0 - 4 bar | 5,820 | 98990866 | |
| NKE 32-160/151 | 3 | 0 - 4 bar | 6,407 | 99105883 | |
| NKE 32-160/163 | 4 | 0 - 4 bar | 6,957 | 99105885 | |
| NKE 32-160/177 | 5.5 | 0 - 6 bar | 7,623 | 99105886 | |
| NKE 32-200.1/172 | 3 | 0 - 4 bar | 6,428 | 99106232 | |
| NKE 32-200.1/188 | 4 | 0 - 6 bar | 6,978 | 99106233 | |
| NKE 32-200.1/205 | 5.5 | 0 - 6 bar | 7,643 | 99106234 | |
| NKE 32-200.1/207 | 7.5 | 0 - 6 bar | 8,583 | 99099256 | |
| NKE 32-200/176 | 4 | 0 - 4 bar | 7,004 | 99105889 | |
| NKE 32-200/190 | 5.5 | 0 - 6 bar | 7,681 | 99105890 | |
| NKE 32-200/206 | 7.5 | 0 - 6 bar | 8,614 | 99099260 | |
| NKE 32-200/219 | 11 | 0 - 10 bar | 10,460 | 99099262 | |
| NKE 32-250/199 | 5.5 | 0 - 6 bar | 8,182 | 99105892 | |
| NKE 32-250/219 | 7.5 11 | 0 - 10 bar 0 - 10 bar | 9,127 11,015 | 99099266 99099270 | |
| NKE 32-250/244 | 15 | 0 - 10 bar | 12,522 | | |
| NKE 32-250/262 | 15 | 0 - 10 041 | 12,322 | 97944779 | |
| NKE 40-125/105 | 1.5 | 0 - 1.6 bar | 5,351 | 98990878 | |
| NKE 40-125/116 | 2.2 | 0 - 2.5 bar | 5,729 | 98990879 | |
| NKE 40-125/127 | 3 | 0 - 2.5 bar | 6,300 | 99105893 | |
| NKE 40-125/139 | 4 | 0 - 4 bar | 6,855 | 99105895 | |
| NKE 40-125/142 | 5.5 | 0 - 4 bar | 7,526 | 99105897 | |
| NKE 40-160/144 | 4 | 0 - 4 bar | 6,992 | 99105898 | |
| NKE 40-160/158 | 5.5 | 0 - 4 bar | 7,663 | 99105899 | |
| NKE 40-160/172 | 7.5 | 0 - 6 bar | 8,594 | 99099273 | |
| NKE 40-160/177 | 11 | 0 - 6 bar | 10,438 | 99098780 | |
| NKE 40-200/172 | 5.5 | 0 - 4 bar | 7,796 | 99105901 | |
| NKE 40-200/188 | 7.5 | 0 - 6 bar | 8,718 | 99099276 | |
| NKE 40-200/206 | 11 | 0 - 6 bar | 10,569 | 99099281 | |
| NKE 40-200/219 | 15 | 0 - 10 bar | 12,041 | 98991028 | |
| NKE 40-250/211 | 11 | 0 - 10 bar | 11,082 | 99099284 | |
| NKE 40-250/230 | 15 | 0 - 10 bar | 12,582 | 98991030 | |
| NKE 40-250/245 | 18.5 | 0 - 10 bar | 13,975 | 98973470 | |
| NKE 40-250/255 | 22 | 0 - 10 bar | 15,944 | 98973472 | |
| NKE 40-315/273 | 22 | 0 - 10 bar | 16,620 | 98973474 | |
| | | | | | |
| NKE 50-125/111 | 3 | 0 - 1.6 bar | 6,536 | 99105902 | |
| NKE 50-125/121 | 4 | 0 - 2.5 bar | 7,092 | 99105903 | |
| NKE 50-125/135 | 5.5 | 0 - 4 bar | 7,838 | 99105904 | |
| NKE 50-125/144 | 7.5 | 0 - 4 bar | 8,708 | 99099287 | |
| NKE 50-160/136 | 5.5 | 0 - 4 bar | 7,875 | 99105905 | |
| NKE 50-160/150 | 7.5 | 0 - 4 bar | 8,745 | 99099291 | |
| NKE 50-160/167 | 11 | 0 - 4 bar | 10,587 | 99099294 | |
| NKE 50-160/177 | 15 | 0 - 6 bar | 12,065 | 98991038 | |
| NKE 50-200/181 | 11 | 0 - 6 bar | 10,678 | 99099298 | |
| NKE 50-200/198 | 15 | 0 - 6 bar | 12,157 | 98991040 | |
| NKE 50-200/210 | 18.5 | 0 - 10 bar | 13,539 | 98973494 | |
| NKE 50-200/219 | 22 | 0 - 10 bar | 15,448 | 98973496 | |
| NKE 50-250/205 | 15 | 0 - 6 bar | 12,399 | 98991041 | |
| NKE 50-250/222 | 18.5 | 0 - 10 bar | 13,773 | 98973500 | |
| NKE 50-250/233 | 22 | 0 - 10 bar | 15,689 | 98901182 | |

Motor specification, reference to accessories and operational details are on page 19.



COMPLETE WITH 2900 RPM (2 POLES) 3 PHASE VARIABLE SPEED MOTOR

| | | | 380-480/500 | V 3ph 50/60Hz |
|---------------------|------|-----------------------|-------------|---------------|
| | P2 | Differential pressure | £ | Product code |
| Model | kW | transducer range | A2 F A | E BQQE |
| NKE 65-125/120-110 | 4 | 0 - 1.6 bar | 7,278 | 99105906 |
| NKE 65-125/127 | 5.5 | 0 - 2.5 bar | 8,037 | 99105907 |
| NKE 65-125/137 | 7.5 | 0 - 2.5 bar | 8,910 | 99099301 |
| NKE 65-125/144 | 11 | 0 - 4 bar | 10,784 | 99098777 |
| NKE 65-160/143 | 7.5 | 0 - 4 bar | 9,004 | 99099305 |
| NKE 65-160/157 | 11 | 0 - 4 bar | 10,872 | 99099308 |
| NKE 65-160/173 | 15 | 0 - 6 bar | 12,379 | 98147969 |
| NKE 65-160/177 | 18.5 | 0 - 6 bar | 13,771 | 98973512 |
| NKE 65-200/162 | 11 | 0 - 4 bar | 11,195 | 99099312 |
| NKE 65-200/177 | 15 | 0 - 6 bar | 12,700 | 98991049 |
| NKE 65-200/190 | 18.5 | 0 - 6 bar | 14,096 | 98973518 |
| NKE 65-200/198 | 22 | 0 - 6 bar | 16,058 | 98973520 |
| NKE 80-160/147-127 | 11 | 0 - 2.5 bar | 10,845 | 99099316 |
| NKE 80-160/151 | 15 | 0 - 4 bar | 12,312 | 98991051 |
| NKE 80-160/161 | 18.5 | 0 - 4 bar | 13,695 | 98973528 |
| NKE 80-160/167 | 22 | 0 - 4 bar | 15,608 | 98973531 |
| NKE 80-200/171 | 22 | 0 - 6 bar | 16,374 | 98973533 |
| NKE 100-160/160-154 | 18.5 | 0 - 4 bar | 14,076 | 98973404 |
| NKE 100-160/167 | 22 | 0 - 4 bar | 16,022 | 98973402 |

ELECTRIC MOTOR

380-500V 3ph 50/60Hz up to 11kW with IE5 efficiency 380-480V 3ph 50/60Hz above 15kW IP 55 Class F Insulation

PUMPS

Standard NKE casing and impeller are cast iron.

All long-coupled NKE pumps have spacer coupling and base frame.

Pumps with Custom Built options such as different material impellers and non standard seals can be configured and priced on request by your Sales Office.

Pump housings are flanged in accordance with EN1092-2 and EN733 standards.

COUNTER FLANGES

 $\label{pump counter Flanges are supplied as optional extras and are indicated on page 22.$

NKE OPERATION

These models have been designed for operation in either open or closed loop control arrangements. The Default control mode is "Uncontrolled Curve / Constant curve".

NKE pumps do not include transducers for closed loop control. Transducers can be supplied as separate items for pipework installations. Single point pressure transducers are listed with their ranges on page 22.

 $The \ transducer \ ranges \ listed \ for \ the \ NKE \ pumps \ only \ cover \ the \ max \ closed \ valve \ pressure \ with \ no \ inlet \ head.$

Please check the inlet head to check if the transducer size needs to be increased.

There is no sensor connection point on the NKE pump and connections need to be made in the pipework.

IMPORTANT

A Grundfos GO based communication device will be required in order to commission the "E" product. See page 22 for details. This device can be used to commission and monitor multiple pumps on multiple sites.





COMPLETE WITH 1450 RPM (4 POLES) 3 PHASE VARIABLE SPEED MOTOR

| | (110220,011 | 380-480/500V 3ph 50/60 | 380-480/500V 3ph 50/60Hz | |
|----------------------------------|--------------|----------------------------|---------------------------------------|------------------|
| | P2 | Differential pressure | | ct code |
| Model | kW | transducer range | A2 F A E BQQE | 004400 |
| NKE 32-160.1/177 | 0.55 0.55 | 0 - 1.6 bar | · | 991108 991110 |
| NKE 32-160/172 NKE 32-160/173 | 0.75 | 0 - 1.6 bar 0 - 1.6 bar | | 991110 |
| NKE 32-100/1/3 | 0.55 | 0 - 1.6 bar | · | 991113 |
| NKE 32-200.1/207 | 0.75 | 0 - 1.6 bar | | 991115 |
| NKE 32-200/184 | 0.55 | 0 - 1.6 bar | | 991135 |
| NKE 32-200/197 | 0.75 | 0 - 1.6 bar | | 991137 |
| NKE 32-200/216 | 1.1 | 0 - 2.5 bar | · | 991138 |
| NKE 32-200/219 | 1.5 | 0 - 2.5 bar | 5,446 99: | 105827 |
| NKE 32-250/206 | 0.75 | 0 - 1.6 bar | 5,652 989 | 991140 |
| NKE 32-250/236 | 1.1 | 0 - 2.5 bar | 5,759 989 | 991151 |
| NKE 32-250/260 | 1.5 | 0 - 2.5 bar | · | 105828 |
| NKE 32-250/262 | 2.20 | 0 - 2.5 bar | 6,378 99: | 105829 |
| NKE 40-125/142 | 0.55 | 0 - 1.0 bar | 4,980 98 | 991158 |
| NKE 40-123/142 NKE 40-160/151 | 0.55 | 0 - 1.0 bar | · | 991160 |
| NKE 40-160/162 | 0.75 | 0 - 1.0 bar | · | 104772 |
| NKE 40-160/177 | 1.1 | 0 - 1.6 bar | | 104784 |
| NKE 40-200/177 | 0.75 | 0 - 1.6 bar | · | 104788 |
| NKE 40-200/198 | 1.1 | 0 - 1.6 bar | · · · · · · · · · · · · · · · · · · · | 104789 |
| NKE 40-200/217 | 1.5 | 0 - 1.6 bar | · | 105830 |
| NKE 40-200/219 | 2.2 | 0 - 2.5 bar | | 105831 |
| NKE 40-250/219 | 1.5 | 0 - 2.5 bar | · · · · · · · · · · · · · · · · · · · | 105832 |
| NKE 40-250/245 | 2.2 | 0 - 2.5 bar | 6,454 99: | 105834 |
| NKE 40-250/260 | 3 | 0 - 2.5 bar | 6,939 993 | 105835 |
| NKE 40-315/283 | 3 | 0 - 4 bar | 7,678 99: | 105836 |
| NKE 40-315/305 | 4 | 0 - 4 bar | 8,260 990 | 099319 |
| NKE 40-315/334 | 5.5 | 0 - 4 bar | 9,465 990 | 099322 |
| NKE 40-315/344 | 7.5 | 0 - 6 bar | 10,462 990 | 099327 |
| | | | | |
| NKE 50-125/129 | 0.55 | 0 - 0.6 bar | | 104790 |
| NKE 50-125/138 | 0.75 | 0 - 1.0 bar | · | 104791 |
| NKE 50-125/144 | 1.1 | 0 - 1.0 bar | | 104792 |
| NKE 50-160/131 | 0.55 | 0 - 0.6 bar | · | 104795 |
| NKE 50-160/139 NKE 50-160/158 | 0.75 1.1 | 0 - 1.0 bar 0 - 1.0 bar | · | 104797 104798 |
| NKE 50-160/175 | 1.5 | 0 - 1.6 bar | | 105838 |
| NKE 50-160/177 | 2.2 | 0 - 1.6 bar | | 105839 |
| NKE 50-200/171 | 1.1 | 0 - 1.6 bar | | 104799 |
| NKE 50-200/188 | 1.5 | 0 - 1.6 bar | | 105841 |
| NKE 50-200/210 | 2.2 | 0 - 1.6 bar | 6,140 99 | 105842 |
| NKE 50-200/219 | 3 | 0 - 2.5 bar | 6,614 99: | 105843 |
| NKE 50-250/221 | 2.2 | 0 - 2.5 bar | 6,382 99: | 105845 |
| NKE 50-250/241 | 3 | 0 - 2.5 bar | | 105846 |
| NKE 50-250/263 | 4 | 0 - 2.5 bar | 7,432 990 | 099330 |
| NKE 50-315/277 | 4 | 0 - 4 bar | · | 099343 |
| NKE 50-315/303 | 5.5 | 0 - 4 bar | · | 099346 |
| NKE 50-315/331 | 7.5 | 0 - 6 bar | · · · · · · · · · · · · · · · · · · · | 099350 |
| NKE 50-315/344 | 11 | 0 - 6 bar | 12,738 989 | 973627 |
| NKE 65-125/122 | 0.55 | 0 06 bar | E 202 000 | 10/1000 |
| NKE 65-125/122 NKE 65-125/130 | 0.55 0.75 | 0 - 0.6 bar 0 - 0.6 bar | · | 104800 104802 |
| NKE 65-125/144 | 1.1 | 0 - 0.6 bar 0 - 1.0 bar | · | 104802 |
| NKE 65-160/135 | 0.75 | 0 - 1.0 bar | | 104804 |
| NKE 65-160/149 | 1.1 | 0 - 1.0 bar | · | 104805 |
| NKE 65-160/165 | 1.5 | 0 - 1.0 bar | · | 105847 |
| NKE 65-160/177 | 2.2 | 0 - 1.6 bar | · | 105848 |
| NKE 65-200/170 | 1.5 | 0 - 1.6 bar | · | 105850 |
| NKE 65-200/189 | 2.2 | 0 - 1.6 bar | | 105851 |
| NKE 65-200/205 | 3 | 0 - 1.6 bar | 7,042 99: | 105852 |
| NKE 65-200/219 | 4 | 0 - 2.5 bar | 7,645 990 | 099354 |
| NKE 65-250/215 | 3 | 0 - 2.5 bar | 7,730 99: | 105864 |
| NKE 65-250/232 | 4 | 0 - 2.5 bar | 8,315 990 | 099357 |
| NKE 65-250/254 | 5.5 | 0 - 2.5 bar | | 099360 |
| NKE 65-250/270 | 7.5 | 0 - 4 bar | | 099364 |
| NKE 65-315/261 | 5.5 | 0 - 2.5 bar | | 099368 |
| NKE 65-315/282 | 7.5 | 0 - 4 bar | | 099371 |
| NKE 65-315/314 | 11 | 0 - 4 bar | | 951019 |
| NKE 65-315/320 | 15 | 0 - 4 bar | 13,805 989 | 973675 |

Motor specification, reference to accessories and operational details are on page 21.



COMPLETE WITH 1450 RPM (4 POLES) 3 PHASE VARIABLE SPEED MOTOR

| | | | 380-480/500V | 3ph 50/60Hz |
|---------------------|------|-----------------------|--------------|--------------|
| | P2 | Differential pressure | £ | Product code |
| Model | kW | transducer range | A2 F A I | BQQE |
| NKE 80-160/146 | 1.5 | 0 - 1.0 bar | 5,827 | 99105867 |
| NKE 80-160/161 | 2.2 | 0 - 1.0 bar | 6,303 | 99105868 |
| NKE 80-160/175 | 3 | 0 - 1.6 bar | 6,778 | 99105870 |
| NKE 80-160/177 | 4 | 0 - 1.6 bar | 7,353 | 99099374 |
| NKE 80-200/164 | 2.2 | 0 - 1.0 bar | 7,076 | 99105871 |
| NKE 80-200/179 | 3 | 0 - 1.6 bar | 7,545 | 99105872 |
| NKE 80-200/196 | 4 | 0 - 1.6 bar | 8,132 | 99099379 |
| NKE 80-200/214 | 5.5 | 0 - 2.5 bar | 9,259 | 99099382 |
| NKE 80-200/222 | 7.5 | 0 - 2.5 bar | 10,099 | 99099385 |
| NKE 80-250/225 | 5.5 | 0 - 2.5 bar | 9,705 | 99099390 |
| NKE 80-250/247 | 7.5 | 0 - 2.5 bar | 10,585 | 99099393 |
| NKE 80-250/270 | 11 | 0 - 4 bar | 12,649 | 98973712 |
| NKE 80-315/280 | 11 | 0 - 4 bar | 12,977 | 98973714 |
| NKE 80-315/305 | 15 | 0 - 4 bar | 14,114 | 98951018 |
| NKE 80-315/320 | 18.5 | 0 - 4 bar | 16,340 | 99495748 |
| NKE 80-400/347 | 18.5 | 0 - 6 bar | 18,933 | 99104808 |
| | | | | |
| NKE 100-160/160-140 | 2.2 | 0 - 1.0 bar | 6,628 | 99105873 |
| NKE 100-160/169 | 3 | 0 - 1.0 bar | 7,120 | 99105874 |
| NKE 100-160/176 | 4 | 0 - 1.0 bar | 7,696 | 99099242 |
| NKE 100-200/178 | 4 | 0 - 1.6 bar | 8,553 | 99105875 |
| NKE 100-200/195 | 5.5 | 0 - 1.6 bar | 9,720 | 99105877 |
| NKE 100-200/211 | 7.5 | 0 - 2.5 bar | 10,579 | 99105878 |
| NKE 100-200/219 | 11 | 0 - 2.5 bar | 12,665 | 98122879 |
| NKE 100-250/215 | 7.5 | 0 - 2.5 bar | 10,849 | 99099231 |
| NKE 100-250/245 | 11 | 0 - 2.5 bar | 12,932 | 98973382 |
| NKE 100-250/274 | 15 | 0 - 4 bar | 14,094 | 98973380 |
| NKE 100-315/279 | 15 | 0 - 4 bar | 14,786 | 98973729 |
| NKE 100-315/295 | 18.5 | 0 - 4 bar | 16,764 | 99104810 |
| | | | | |
| NKE 125-200/176-154 | 5.5 | 0 - 1.0 bar | 10,501 | 99099238 |
| NKE 125-200/196-180 | 7.5 | 0 - 1.6 bar | 11,349 | 99099234 |
| NKE 125-200/219 | 11 | 0 - 2.5 bar | 13,457 | 98973390 |
| NKE 125-200/226 | 15 | 0 - 2.5 bar | 14,600 | 98973387 |
| NKE 125-250/220 | 11 | 0 - 2.5 bar | 13,313 | 98973731 |
| NKE 125-250/236 | 15 | 0 - 2.5 bar | 14,445 | 98973733 |
| NKE 125-250/249 | 18.5 | 0 - 2.5 bar | 16,418 | 96783217 |
| NKE 125-315/275 | 18.5 | 0 - 4 bar | 18,836 | 95108574 |
| | | | | |
| NKE 150-200/210-158 | 7.5 | 0 - 1.0 bar | 12,565 | 99157805 |
| NKE 150-200/218-208 | 11 | 0 - 1.6 bar | 15,155 | 98187001 |
| NKE 150-200/224 | 15 | 0 - 1.6 bar | 16,311 | 98965137 |
| NKE 150-250/226-214 | 15 | 0 - 1.6 bar | 17,249 | 98973400 |
| NKE 150-250/230 | 18.5 | 0 - 2.5 bar | 19,138 | 99105549 |

ELECTRIC MOTOR

380-500V 3ph 50/60Hz up to 7.5kW with IE5 efficiency 380-480V 3ph 50/60Hz above 11kW

IP 55 Class F Insulation

Standard NKE casing and impeller are cast iron.

All long-coupled NKE pumps have spacer coupling and base frame.

Pumps with Custom Built options such as different material impellers and non standard seals can be configured and priced on request by your Sales Office.

Pump housings are flanged in accordance with EN1092-2 and EN733 standards.

COUNTER FLANGES

Pump Counter Flanges are supplied as optional extras and are indicated on page 22.

NKE OPERATION

These models have been designed for operation in either open or closed loop control arrangements.

The Default control mode is "Uncontrolled Curve / Constant curve".

NKE pumps do not include transducers for closed loop control.

 $\label{thm:constraints} Transducers\ can\ be\ supplied\ as\ separate\ items\ for\ pipework\ installations.$

Single point pressure transducers are listed with their ranges on page 22.

The transducer ranges listed for the NKE pumps only cover the max closed valve pressure with no inlet head.

Please check the inlet head to check if the transducer size needs to be increased.

There is no sensor connection point on the NKE pump and connections need to be made in the pipework .

IMPORTANT

A Grundfos GO based communication device will be required in order to commission the "E" product. See page 22 for details. This device can be used to commission and monitor multiple pumps on multiple sites.



CATEGORY 2 - ACCESSORIES

COUNTER FLANGES FOR NB, NBE, NK, NKE PUMPS

Screwed Boss counter flanges in accordance with EN1092-2 are available up to DN100 only as an optional extra.

| Pump flange size | Rating | Thread | £ | Product Code |
|------------------|---------|----------|-----|--------------|
| DN 32 | PN10/16 | 1"¼ BSPF | 81 | 419901 |
| DN 40 | PN10/16 | 1"½ BSPF | 98 | 429902 |
| DN 50 | PN10/16 | 2" BSPF | 116 | 339903 |
| DN 65 | PN10/16 | 2"½ BSPF | 81 | 349902 |
| DN 80 | PN10/16 | 3" BSPF | 98 | 350540 |
| DN 100 | PN10/16 | 4" BSPF | 116 | 369901 |
| DN 125 | PN10/16 | | - | - |
| DN 150 | PN10/16 | ' | - | - |
| DN 200 | PN10 | · | - | = |
| DN 250 | PN10 | | = | = |
| DN 300 | PN10 | | = | = |

| £ | Product Code |
|-----|--|
| 81 | 419902 |
| 106 | 429901 |
| 141 | 339901 |
| 81 | 349904 |
| 98 | 350541 |
| 92 | 96569188 |
| 287 | 96414677 |
| 308 | 96414676 |
| 327 | 96413358 |
| 349 | 96691156 |
| 369 | 96691157 |
| | 81 106 141 81 98 92 287 308 327 349 |

The flange price includes one flange, one gasket and nuts and bolts. Two required each pump. All counter flanges in uncoated steel St 37-2 (DIN 1.0038)

CATEGORY 2 - VARIABLE SPEED NBE/NKE and CRI/CR/CRNE PUMP SENSORS & KITS

PRESSURE TRANSDUCER - SINGLE POINT PRESSURE TRANSMITTER FOR OPEN CIRCUIT APPLICATIONS

| Model | Fittings | Transducer Range | £ | Product Code |
|---------------------|-----------|------------------|-----|---------------------|
| Danfoss MBS 3000 | 1/2" BSPM | 0-2.5 bar | 294 | 99033768 |
| Danfoss MBS 3000 | 1/2" BSPM | 0-4 bar | 294 | 96637450 |
| Danfoss MBS 3000 | 1/2" BSPM | 0-6 bar | 294 | 96637451 |
| Danfoss MBS 3000 | 1/2" BSPM | 0-10 bar | 294 | 96637452 |
| Danfoss MBS 3000 | 1/2" BSPM | 0-16 bar | 294 | 96637453 |
| Danfoss MBS 3000 | 1/2" BSPM | 0-25 bar | 294 | 91072079 |
| Selvano e a a la la | | | | |

PRESSURE TRANSDUCER - SINGLE POINT HIGH PRESSURE TRANSMITTER FOR OPEN CIRCUIT APPLICATIONS

| Model | Fittings | Transducer Range | £ | Product Code |
|------------------|-----------|------------------|-----|---------------------|
| Danfoss MBS 3000 | 1/2" BSPM | 0-40 bar | 677 | 96483573 |
| Danfoss MBS 3000 | 1/2" BSPM | 0-60 bar | 677 | 96483574 |

with 2m cable



GRUNDFOS GO REMOTE

The Grundfos Go Remote is used for wireless infrared or radio communication with the pumps.



| Model | | £ | Product Code |
|--------|--|-----|--------------|
| MI 301 | Universal dongle for iOS and Android based devices | 461 | 98046408 |

CATEGORY 2 - CRI 1s and CRI 1 304 STAINLESS STEEL VERTICAL MULTISTAGE PUMPS 50Hz

COMPLETE WITH DIRECT COUPLED 2900 RPM ELECTRIC MOTOR

| | | | 230V 1p | oh 50Hz | 400V 3 ₁ | oh 50Hz |
|-----------|------|------------|----------|--------------|---------------------|--------------|
| | P2 | Pipe | £ | Product Code | £ | Product Code |
| Model | kW | connection | A CA A | / HQQV | A CA A | / HQQV |
| CRI 1s-2 | 0.37 | 32mm | 1007 | 96531799 | 955 | 96515806 |
| CRI 1s-3 | 0.37 | 32mm | 1035 | 96531840 | 986 | 96515807 |
| CRI 1s-4 | 0.37 | 32mm | 1067 | 96531842 | 1,017 | 96515808 |
| CRI 1s-5 | 0.37 | 32mm | 1097 | 96531843 | 1,047 | 96515810 |
| CRI 1s-6 | 0.37 | 32mm | 1127 | 96531845 | 1,076 | 96515811 |
| CRI 1s-7 | 0.37 | 32mm | 1159 | 96531847 | 1,108 | 96515813 |
| CRI 1s-8 | 0.37 | 32mm | 1188 | 96531849 | 1,137 | 96515815 |
| CRI 1s-9 | 0.37 | 32mm | 1218 | 96531871 | 1,166 | 96515817 |
| CRI 1s-10 | 0.37 | 32mm | 1247 | 96531873 | 1,196 | 96515818 |
| CRI 1s-11 | 0.37 | 32mm | 1278 | 96531875 | 1,228 | 96515820 |
| CRI 1s-12 | 0.37 | 32mm | 1308 | 96531878 | 1,257 | 96515821 |
| CRI 1s-13 | 0.37 | 32mm | 1337 | 96531890 | 1,287 | 96515822 |
| CRI 1s-15 | 0.55 | 32mm | 1456 | 96531891 | 1,383 | 96515823 |
| CRI 1s-17 | 0.55 | 32mm | 1500 | 96531893 | 1,428 | 96515824 |
| CRI 1s-19 | 0.55 | 32mm | 1578 | 96531898 | 1,505 | 96515825 |
| | | | A FGJ A | V HQQV | A FGJ A | V HQQV |
| CRI 1s-21 | 0.75 | DN 25/32 | 1824 | 96531896 | 1,695 | 96527621 |
| CRI 1s-23 | 0.75 | DN 25/32 | 1900 | 96531930 | 1,773 | 96527622 |
| CRI 1s-25 | 0.75 | DN 25/32 | 1979 | 96531932 | 1,850 | 96527623 |
| CRI 1s-27 | 1.1 | DN 25/32 | 2181 | 96533036 | 1,972 | 96527624 |
| CRI 1s-30 | 1.1 | DN 25/32 | 2354 | 96533037 | 2,145 | 96527625 |
| CRI 1s-33 | 1.1 | DN 25/32 | 2467 | 96533038 | 2,258 | 96527626 |
| CRI 1s-36 | 1.1 | DN 25/32 | 2581 | 96533039 | 2,373 | 96527627 |
| | | | A CA A V | / HQQV | A CA A | / HQQV |
| CRI 1-2 | 0.37 | 32mm | 993 | 96532164 | 943 | 96516338 |
| CRI 1-3 | 0.37 | 32mm | 1023 | 96532165 | 972 | 96516339 |
| CRI 1-4 | 0.37 | 32mm | 1053 | 96532166 | 1,004 | 96516340 |
| CRI 1-5 | 0.37 | 32mm | 1084 | 96532167 | 1,033 | 96516341 |
| CRI 1-6 | 0.37 | 32mm | 1114 | 96532168 | 1,062 | 96516342 |
| CRI 1-7 | 0.37 | 32mm | 1146 | 96532169 | 1,094 | 96516343 |
| CRI 1-8 | 0.55 | 32mm | 1174 | 96532170 | 1,102 | 96516344 |
| CRI 1-9 | 0.55 | 32mm | 1213 | 96532171 | 1,139 | 96516345 |
| CRI 1-10 | 0.55 | 32mm | 1260 | 96532172 | 1,188 | 96516346 |
| CRI 1-11 | 0.55 | 32mm | 1308 | 96532173 | 1,236 | 96516347 |
| CRI 1-12 | 0.75 | 32mm | 1407 | 96532482 | 1,278 | 96516348 |
| CRI 1-13 | 0.75 | 32mm | 1463 | 96532489 | 1,335 | 96516349 |
| CRI 1-15 | 0.75 | 32mm | 1558 | 96532497 | 1,431 | 96516350 |
| CRI 1-17 | 1.1 | 32mm | 1735 | 96533345 | 1,528 | 96516351 |
| CRI 1-19 | 1.1 | 32mm | 1831 | 96533346 | 1,623 | 96516352 |
| | | | A FGJ A | V HQQV | A FGJ A | V HQQV |
| CRI 1-21 | 1.1 | DN 25/32 | 1988 | 96533347 | 1,781 | 96530620 |
| CRI 1-23 | 1.1 | DN 25/32 | 2067 | 96533348 | 1,858 | 96529493 |
| CRI 1-25 | 1.5 | DN 25/32 | 2392 | 96533349 | 2,111 | 96530621 |
| CRI 1-27 | 1.5 | DN 25/32 | 2523 | 96533350 | 2,242 | 96530622 |
| CRI 1-30 | 1.5 | DN 25/32 | 2664 | 96533352 | 2,384 | 96530623 |
| CRI 1-33 | 2.2 | DN 25/32 | 2985 | 96556933 | 2,680 | 96530624 |
| CRI 1-36 | 2.2 | DN 25/32 | 3126 | 96533354 | 2,822 | 96530625 |

REMEMBER: PUMPS with CA Bases normally need 2x 2 Bolt Oval Flanges - see page 47

ELECTRIC MOTOR

380-415V 3ph 50Hz

220-240V 1ph 50Hz

IP55 Class F insulation

All 3 Phase motors 0.75kW and above are IE3 Efficiency.

Please see page 60 for motor retrofit details.

Custom Built pump options; different flanges, seals and elastomers can be configured and priced on request by your Sales Office.

Pipe Connections

CRI 1s, 1, 3 & 5 pumps with CA base are supplied **without** pipe connections.

Two bolt oval pipe flanges and DIN counter flanges must be ordered as separate items.

CRI flanged models (FGJ) are DIN flanged as standard and are supplied without the counter flanges to EN 1092-2 1997 (BS4504: 1989).

Please see page 46/47 for pipe connection accessories and list prices.





CATEGORY 2 - CRI 3 and CRI 5 304 STAINLESS STEEL VERTICAL MULTISTAGE PUMPS 50Hz

COMPLETE WITH DIRECT COUPLED 2900 RPM ELECTRIC MOTOR

| | | | 230V 1 | ph 50Hz | 400V 3p | h 50Hz |
|-----------|------|---------------------------------------|---------|--------------|----------|--------------|
| | P2 | Pipe | £ | Product Code | £ | Product Code |
| Model | kW | connection | A CA A | V HQQV | A CA A \ | / HQQV |
| CRI 3-2 | 0.37 | 32mm | 969 | 96533184 | 919 | 96516743 |
| CRI 3-3 | 0.37 | 32mm | 1011 | 96533208 | 961 | 96516744 |
| CRI 3-4 | 0.37 | 32mm | 1060 | 96533210 | 1,009 | 96516745 |
| CRI 3-5 | 0.37 | 32mm | 1102 | 96533212 | 1,051 | 96516746 |
| CRI 3-6 | 0.55 | 32mm | 1139 | 96533214 | 1,067 | 96516747 |
| CRI 3-7 | 0.55 | 32mm | 1192 | 96533215 | 1,121 | 96516748 |
| CRI 3-8 | 0.75 | 32mm | 1305 | 96533216 | 1,178 | 96516749 |
| CRI 3-9 | 0.75 | 32mm | 1357 | 96533217 | 1,228 | 96516750 |
| CRI 3-10 | 0.75 | 32mm | 1407 | 96533218 | 1,278 | 96516751 |
| CRI 3-11 | 1.1 | 32mm | 1564 | 96533219 | 1,357 | 96516752 |
| CRI 3-12 | 1.1 | 32mm | 1620 | 96533220 | 1,412 | 96516753 |
| CRI 3-13 | 1.1 | 32mm | 1676 | 96533221 | 1,468 | 96516754 |
| CRI 3-15 | 1.1 | 32mm | 1791 | 96533222 | 1,583 | 96516756 |
| | | | A FGJ A | V HQQV | A FGJ A | / HQQV |
| CRI 3-17 | 1.5 | DN 25/32 | 2,141 | 96533223 | 1,860 | 96527929 |
| CRI 3-19 | 1.5 | DN 25/32 | 2,250 | 96533224 | 1,970 | 96527930 |
| CRI 3-21 | 2.2 | DN 25/32 | 2,350 | 96533225 | 2,044 | 96527931 |
| CRI 3-23 | 2.2 | DN 25/32 | 2,464 | 96533226 | 2,159 | 96527941 |
| CRI 3-25 | 2.2 | DN 25/32 | 2,579 | 96533227 | 2,275 | 96527942 |
| CRI 3-27 | 2.2 | DN 25/32 | 2,690 | 96533228 | 2,386 | 96527943 |
| CRI 3-29 | 2.2 | DN 25/32 | 2,806 | 96533229 | 2,502 | 96527944 |
| CRI 3-31 | 3 | DN 25/32 | - | - | 2,555 | 96527945 |
| CRI 3-33 | 3 | DN 25/32 | - | - | 2,694 | 96527948 |
| CRI 3-36 | 3 | DN 25/32 | - | - | 2,835 | 96527949 |
| | | · · · · · · · · · · · · · · · · · · · | A CA A | V HQQV | A CA A \ | / HQQV |
| CRI 5-2 | 0.37 | 32mm | 1,094 | 96533277 | 1,044 | 96517120 |
| CRI 5-3 | 0.55 | 32mm | 1,166 | 96533278 | 1,094 | 96517121 |
| CRI 5-4 | 0.55 | 32mm | 1,244 | 96533279 | 1,172 | 96517122 |
| CRI 5-5 | 0.75 | 32mm | 1,393 | 96533280 | 1,265 | 96522106 |
| CRI 5-6 | 1.1 | 32mm | 1,505 | 96533281 | 1,297 | 96517123 |
| CRI 5-7 | 1.1 | 32mm | 1,554 | 96533282 | 1,345 | 96517124 |
| CRI 5-8 | 1.1 | 32mm | 1,602 | 96533283 | 1,393 | 96517125 |
| CRI 5-9 | 1.5 | 32mm | 1,853 | 96533284 | 1,572 | 96517126 |
| CRI 5-10 | 1.5 | 32mm | 1,914 | 96533285 | 1,634 | 96517127 |
| CRI 5-11 | 2.2 | 32mm | 2,079 | 96533286 | 1,775 | 96517128 |
| CRI 5-12 | 2.2 | 32mm | 2,125 | 96533287 | 1,822 | 96517129 |
| | | | A FGJ A | V HQQV | A FGJ A | V HQQV |
| CRI 5-13 | 2.2 | DN 25/32 | 2,237 | 96533288 | 1,932 | 96528032 |
| CRI 5-14 | 2.2 | DN 25/32 | 2,285 | 96533289 | 1,981 | 96528033 |
| CRI 5-15 | 2.2 | DN 25/32 | 2,334 | 96533290 | 2,028 | 96528034 |
| CRI 5-16 | 2.2 | DN 25/32 | 2,379 | 96533291 | 2,074 | 96528035 |
| CRI 5-18 | 3 | DN 25/32 | - | - | 2,310 | 96528036 |
| CRI 5-20 | 3 | DN 25/32 | | | 2,408 | 96528037 |
| CRI 5-22 | 4 | DN 25/32 | | | 2,527 | 96528038 |
| CRI 5-24 | 4 | DN 25/32 | - | - | 2,624 | 96528039 |
| CRI 5-26 | 4 | DN 25/32 | - | | 2,731 | 96528040 |
| CRI 5-29 | 4 | DN 25/32 | - | | 2,875 | 96528041 |
| CRI 5-32 | 5.5 | DN 25/32 | | | 3,252 | 96528043 |
| CRI 5-36 | 5.5 | DN 25/32 | | | 3,438 | 96528044 |
| 5.11 5 50 | J.J | DI1 23/32 | | | J,-30 | 30320044 |

REMEMBER: PUMPS with CA Bases normally need 2x 2 Bolt Oval Flanges - see page 47

ELECTRIC MOTOR

380-415V 3ph 50Hz

220-240V 1ph 50Hz

IP55 Class F insulation

All 3 Phase motors 0.75kW and above are IE3 Efficiency.

Please see page 60 for motor retrofit details.

Custom Built pump options; different flanges, seals and elastomers can be configured and priced on request by your Sales Office.

Pipe Connections

CRI 1s, 1, 3 & 5 pumps with CA base are supplied without pipe connections.

Two bolt oval pipe flanges and DIN counter flanges must be ordered as separate items.

CRI flanged models (FGJ) are DIN flanged as standard and are supplied without the counter flanges to EN 1092-2 1997 [was BS4504 : 1989]

Please see page 46/47 for pipe connection accessories and list prices.





CATEGORY 2 - CRI 10, CRI 15, and CRI 20 304 STAINLESS STEEL VERTICAL MULTISTAGE PUMPS 50Hz

COMPLETE WITH DIRECT COUPLED 2900 RPM ELECTRIC MOTOR

| | | | 230V 1 ₁ | ph 50Hz | 400V 3p | h 50Hz |
|------------------------|------|------------|---------------------|--------------|----------------|--------------|
| | P2 | Pipe | £ | Product Code | £ | Product Code |
| Model | kW | connection | A CA A | V HQQV | A CA A \ | / HQQV |
| CRI 10-1 | 0.37 | 50mm | 1,516 | 96500939 | 1,465 | 96501149 |
| CRI 10-2 | 0.75 | 50mm | 1,647 | 96500940 | 1,518 | 96501150 |
| CRI 10-3 | 1.1 | 50mm | 1,959 | 96500941 | 1,752 | 96501151 |
| CRI 10-4 | 1.5 | 50mm | 2,229 | 96500942 | 1,949 | 96501152 |
| CRI 10-5 | 2.2 | 50mm | 2,412 | 96500943 | 2,109 | 96501153 |
| CRI 10-6 | 2.2 | 50mm | 2,523 | 96500944 | 2,218 | 96501154 |
| CRI 10-7 | 3 | 50mm | - | - | 2,394 | 96501155 |
| CRI 10-8 | 3 | 50mm | = | = | 2,502 | 96501156 |
| CRI 10-9 | 3 | 50mm | = | = | 2,606 | 96501157 |
| | | | | | A FGJ A | |
| CRI 10-10 | 4 | DN 40 | = | = | 3,080 | 96501343 |
| CRI 10-12 | 4 | DN 40 | - | - | 3,291 | 96501344 |
| CRI 10-14 | 5.5 | DN 40 | - | - | 3,820 | 96501345 |
| CRI 10-16 | 5.5 | DN 40 | - | _ | 4,033 | 96501346 |
| CRI 10-18 | 7.5 | DN 40 | | - | 4,419 | 96501347 |
| CRI 10-20 | 7.5 | DN 40 | | - | 4,623 | 96501348 |
| CRI 10-22 | 7.5 | DN 40 | | - | 4,837 | 96501349 |
| | | | A FGJ A V HQQV | | A FGJ A V HQQV | |
| CRI 15-1 | 1.1 | DN 50 | 2,208 | 96501685 | 2,002 | 96501815 |
| CRI 15-2 | 2.2 | DN 50 | 2,725 | 96501686 | 2,425 | 96501816 |
| CRI 15-3 | 3 | DN 50 | -, | - | 2,761 | 96502002 |
| CRI 15-4 | 4 | DN 50 | | - | 3,160 | 96502003 |
| CRI 15-5 | 4 | DN 50 | | - | 3,306 | 96502004 |
| CRI 15-6 | 5.5 | DN 50 | | - | 3,891 | 96502005 |
| CRI 15-7 | 5.5 | DN 50 | | _ | 4,041 | 96502006 |
| CRI 15-8 | 7.5 | DN 50 | | _ | 4,649 | 96502007 |
| CRI 15-9 | 7.5 | DN 50 | - | | 4,793 | 96502008 |
| CRI 15-10 | 11 | DN 50 | | - | 5,634 | 96502009 |
| CRI 15-12 | 11 | DN 50 | | <u>-</u> | 5,928 | 96502010 |
| CRI 15-14 | 11 | DN 50 | | | 6,220 | 96502011 |
| CRI 15-17 | 15 | DN 50 | | - | 7,896 | 96502012 |
| - Citi 25 27 | | 5.1.50 | A FGJ A | V HQQV | A FGJ A | |
| CRI 20-1 | 1.1 | DN 50 | 2,185 | 96500314 | 1,981 | 96500436 |
| CRI 20-2 | 2.2 | DN 50 | 2,712 | 96500315 | 2,412 | 96500437 |
| CRI 20-3 | 4 | DN 50 | | - | 3,228 | 96500609 |
| CRI 20-4 | 5.5 | DN 50 | - | | 3,909 | 96500610 |
| CRI 20-5 | 5.5 | DN 50 | | | 4,060 | 96500611 |
| CRI 20-6 | 7.5 | DN 50 | | | 4,681 | 96500612 |
| CRI 20-7 | 7.5 | DN 50 | | | 4,829 | 96500613 |
| CRI 20-7 | 11 | DN 50 | | <u> </u> | 5,983 | 96500614 |
| CRI 20-8 | 11 | DN 50 | | <u> </u> | 6,286 | 96500615 |
| CRI 20-10 | 15 | DN 50 | <u> </u> | <u> </u> | 7,631 | 96500616 |
| CRI 20-12 | 15 | DN 50 | | <u> </u> | 7,994 | 96500617 |
| CRI 20-14 CRI 20-17 | 18.5 | DN 50 | - | | 9,426 | 96500617 |
| CNI 20-17 | 18.5 | טט אוט | | - | 9,420 | 9000018 |

REMEMBER: PUMPS with CA Bases normally need 2x 2 Bolt Oval Flanges - see page 47

ELECTRIC MOTOR

380-415V 3ph 50Hz

220-240V 1ph 50Hz

IP55 Class F insulation

All 3 Phase motors 0.75kW and above are IE3 Efficiency.

Please see page 60 for motor retrofit details.

Custom Built pump options; different flanges, seals and elastomers can be configured and priced on request by your Sales Office.

Pipe Connections

CRI 10/15/20 pumps with CA base are supplied $\mbox{\it without}$ pipe connections.

Two bolt oval pipe flanges and DIN counter flanges must be ordered as separate items.

CRI flanged models (FGJ) are DIN flanged as standard and are supplied without the counter flanges to EN 1092-2 1997 [was BS4504 : 1989]

Please see page 46/47 for pipe connection accessories and list prices.





CATEGORY 2 - CR32 and CR45 CAST IRON/304 STAINLESS STEEL VERTICAL MULTISTAGE PUMPS 50Hz

COMPLETE WITH DIRECT COUPLED 2900 RPM ELECTRIC MOTOR

| | P2 | Pipe |
|------------|------|------------|
| Model | kW | connection |
| CR 32-1-1 | 1.5 | DN 65 |
| CR 32-1 | 2.2 | DN 65 |
| CR 32-2-2 | 3 | DN 65 |
| CR 32-2 | 4 | DN 65 |
| CR 32-3-2 | 5.5 | DN 65 |
| CR 32-3 | 5.5 | DN 65 |
| CR 32-4-2 | 7.5 | DN 65 |
| CR 32-4 | 7.5 | DN 65 |
| CR 32-5-2 | 11 | DN 65 |
| CR 32-5 | 11 | DN 65 |
| CR 32-6-2 | 11 | DN 65 |
| CR 32-6 | 11 | DN 65 |
| CR 32-7-2 | 15 | DN 65 |
| | | |
| CR 32-7 | 15 | DN 65 |
| CR 32-8-2 | 15 | DN 65 |
| CR 32-8 | 15 | DN 65 |
| CR 32-9-2 | 18.5 | DN 65 |
| CR 32-9 | 18.5 | DN 65 |
| CR 32-10-2 | 18.5 | DN 65 |
| CR 32-10 | 18.5 | DN 65 |
| CR 32-11-2 | 22 | DN 65 |
| CR 32-11 | 22 | DN 65 |
| CR 32-12-2 | 22 | DN 65 |
| CR 32-12 | 22 | DN 65 |
| CR 32-13-2 | 30 | DN 65 |
| CR 32-13 | 30 | DN 65 |
| CR 32-14-2 | 30 | DN 65 |
| CR 32-14 | 30 | DN 65 |
| | | |
| CR 45-1-1 | 3 | DN 80 |
| CR 45-1 | 4 | DN 80 |
| CR 45-2-2 | 5.5 | DN 80 |
| CR 45-2 | 7.5 | DN 80 |
| CR 45-3-2 | 11 | DN 80 |
| CR 45-3 | 11 | DN 80 |
| CR 45-4-2 | 15 | DN 80 |
| CR 45-4 | 15 | DN 80 |
| CR 45-5-2 | 18.5 | DN 80 |
| CR 45-5 | 18.5 | DN 80 |
| CR 45-6-2 | 22 | DN 80 |
| CR 45-6 | 22 | DN 80 |
| CR 45-7-2 | 30 | DN 80 |
| CR 45-7-2 | 30 | DN 80 |
| CR 45-8-2 | 30 | DN 80 |
| | | |
| CR 45-8 | 30 | DN 80 |
| CR 45-9-2 | 30 | DN 80 |
| CR 45-9 | 37 | DN 80 |
| CR 45-10-2 | 37 | DN 80 |
| CR 45-10 | 37 | DN 80 |
| CR 45-11-2 | 45 | DN 80 |
| CR 45-11 | 45 | DN 80 |
| CR 45-12-2 | 45 | DN 80 |
| CR 45-12 | 45 | DN 80 |
| CR 45-13-2 | 45 | DN 80 |

| 400V 3p | h 50Hz | | | | |
|----------------|----------|--|--|--|--|
| £ Product Code | | | | | |
| AFAV | | | | | |
| 2,199 | 96121978 | | | | |
| 2,347 | 96121979 | | | | |
| 2,703 | 96121980 | | | | |
| 3,158 | 96122037 | | | | |
| 3,957 | 96122038 | | | | |
| 3,957 | 96122039 | | | | |
| 4,897 | 96122040 | | | | |
| 4,897 | 96122041 | | | | |
| 6,147 | 96122042 | | | | |
| 6,147 | 96122043 | | | | |
| 6,482 | 96122044 | | | | |
| 6,482 | 96122045 | | | | |
| 7,620 | 96122046 | | | | |
| 7,620 | 96122047 | | | | |
| 7,953 | 96122048 | | | | |
| 7,953 | 96122049 | | | | |
| 9,021 | 96122050 | | | | |
| 9,021 | 96122051 | | | | |
| 9,350 | 96122052 | | | | |
| 9,350 | 96122053 | | | | |
| 10,477 | 96122054 | | | | |
| 10,477 | 96122055 | | | | |
| 10,824 | 96122056 | | | | |
| 10,824 | 96122057 | | | | |
| 12,185 | 96122058 | | | | |
| 12,185 | 96122059 | | | | |
| 12,517 | 96122060 | | | | |
| 12,517 | 96122061 | | | | |
| | | | | | |
| 2,579 | 96122771 | | | | |
| 3,085 | 96122822 | | | | |
| 3,886 | 96122823 | | | | |
| 4,899 | 96122824 | | | | |
| 6,181 | 96122825 | | | | |
| 6,181 | 96122826 | | | | |
| 7,663 | 96122827 | | | | |
| 7,663 | 96122828 | | | | |
| 9,109 | 96122829 | | | | |
| 9,109 | 96122830 | | | | |
| 10,328 | 96122831 | | | | |
| 10,328 | 96122832 | | | | |
| 11,256 | 96122833 | | | | |
| 11,256 | 96122834 | | | | |
| 11,621 | 96122835 | | | | |
| 11,621 | 96122836 | | | | |
| 11,989 | 96122837 | | | | |
| 13,050 | 96122838 | | | | |
| 13,386 | 96122839 | | | | |
| 13,386 | 96122840 | | | | |
| 17,383 | 96122841 | | | | |
| 17,383 | 96122842 | | | | |
| 17,781 | 96122843 | | | | |
| 17,781 | 96122844 | | | | |
| 18,180 | 96122845 | | | | |
| | | | | | |

ELECTRIC MOTOR

380-415V 3ph 50Hz

IP55 Class F insulation

All 3 Phase motors 0.75kW and above are IE3 Efficiency.

Please see page 60 for motor retrofit details.

Custom Built pump options; different flanges, seals and elastomers

can be configured and priced on request by your Sales Office.

PIPE CONNECTIONS

 $All\ Large\ CR\ models\ are\ DIN\ flanged\ as\ standard\ and\ are\ supplied\ without\ the\ counter\ flanges\ to\ EN\ 1092-2\ 1997\ [was\ BS4504:1989]$

Please see page 46/47 for pipe connection accessories and list prices.



CATEGORY 2 - CR64 to CR185 CAST IRON/304 STAINLESS STEEL VERTICAL MULTISTAGE PUMPS 50Hz

COMPLETE WITH DIRECT COUPLED 2900 RPM ELECTRIC MOTOR

| COMPLETE WITH DIR | RECT COUPLED 2900 RPM E | LECTRIC MOTOR | 400V 3ph 50H | Hz |
|----------------------|-------------------------|------------------|------------------|----------------------|
| | P2 | Pipe | | roduct Code |
| Model | kW | connection | A F A V HQQ | V |
| CR 64-1-1 | 4 | DN 100 | 3,048 | 96123548 |
| CR 64-1 | 5.5 | DN 100 | 3,963 | 96123549 |
| CR 64-2-2 | 7.5 | DN 100 | 4,794 | 96123550 |
| CR 64-2-1 | 11 | DN 100 | 5,567 | 96123551 |
| CR 64-2 | 11 | DN 100 | 5,567 | 96123552 |
| CR 64-3-2 | 15 | DN 100 | 7,391 | 96123553 |
| CR 64-3-1 CR 64-3 | 15 18.5 | DN 100 DN 100 | 7,391 | 96123554 96123555 |
| CR 64-4-2 | 18.5 | DN 100 | 8,487 8,887 | 96123556 |
| CR 64-4-1 | 22 | DN 100 | 9,860 | 96123557 |
| CR 64-4 | 22 | DN 100 | 9,860 | 96123558 |
| CR 64-5-2 | 30 | DN 100 | 10,515 | 96123559 |
| CR 64-5-1 | 30 | DN 100 | 10,515 | 96123560 |
| CR 64-5 | 30 | DN 100 | 10,515 | 96123561 |
| CR 64-6-2 | 30 | DN 100 | 10,914 | 96123562 |
| CR 64-6-1 | 37 | DN 100 | 12,848 | 96123563 |
| CR 64-6 | 37 | DN 100 | 12,848 | 96123564 |
| CR 64-7-2 | 37 | DN 100 | 13,247 | 96123565 |
| CR 64-7-1 | 37 | DN 100 | 13,247 | 96123566 |
| CR 64-7 | 45 | DN 100 | 17,466 | 96123567 |
| CR 64-8-2 | 45 | DN 100 | 17,859 | 96123568 |
| CR 64-8-1 | 45 | DN 100 | 17,859 | 96123569 |
| CD 05 1 1 | | DN 100 | A F A V HQQ | |
| CR 95-1-1 | 5.5 | DN 100 | 4,475 | 99141746 |
| CR 95-1 CR 95-2-2 | 7.5 11 | DN 100 DN 100 | 5,589 7,318 | 99141747 99141748 |
| CR 95-2-2 | 15 | DN 100 | 9,115 | 99141749 |
| CR 95-3-2 | 18.5 | DN 100 | 10,678 | 99141750 |
| CR 95-3 | 22 | DN 100 | 11,942 | 99141751 |
| CR 95-4 | 30 | DN 100 | 12,807 | 99141752 |
| CR 95-5 | 37 | DN 100 | 15,633 | 99141753 |
| CR 95-6 | 45 | DN 100 | 19,794 | 99141754 |
| CR 95-7 | 55 | DN 100 | 23,752 | 99141755 |
| CR 95-8-2 | 55 | DN 100 | 24,282 | 99141756 |
| | | | A F A V HQQ | V |
| CR 125-1 | 11 | DN 150 | 7,318 | 99142581 |
| CR 125-2-2 | 15 | DN 150 | 9,115 | 99142582 |
| CR 125-2-1 | 18.5 | DN 150 | 10,678 | 99142633 |
| CR 125-2 | 22 | DN 150 | 11,942 | 99142634 |
| CR 125-3-1 | 30 | DN 150 | 12,807 | 99142636 |
| CR 125-3 | 37 | DN 150 | 14,970 | 99142637 |
| CR 125-4-2 | 37 45 | DN 150 | 15,633 | 99142638 |
| CR 125-4 CR 125-5 | 55 | DN 150 DN 150 | 19,794 24,282 | 99142639 99142640 |
| CR 123 3 | 33 | DIV 130 | A F A V HQQ | |
| CR 155-1-1 | 11 | DN 150 | 7,318 | 99143262 |
| CR 155-1 | 15 | DN 150 | 9,115 | 99143263 |
| CR 155-2-2 | 22 | DN 150 | 11,942 | 99143264 |
| CR 155-2 | 30 | DN 150 | 12,807 | 99143265 |
| CR 155-3-2 | 37 | DN 150 | 15,633 | 99143266 |
| CR 155-3 | 45 | DN 150 | 19,794 | 99143267 |
| CR 155-4-1 | 55 | DN 150 | 24,282 | 99143268 |
| | | | A F A V HQQ | .V |
| CR185-1-1 | 18.5 | DN 200 | 12,564 | 99143723 |
| CR185-1 | 22 | DN 200 | 13,794 | 99143724 |
| CR185-2-2 | 37 | DN 200 | 17,528 | 99143725 |
| CR185-2 | 45 | DN 200 | 21,763 | 99143726 |
| CR185-3-3 | 55 | DN 200 | 26,343 | 99143727 |
| CR185-3 | 75 75 | DN 200 | 31,487 | 99143728 |
| CR185-4-3 CR185-4 | 90 | DN 200 DN 200 | 32,280 37,568 | 99143729 99143730 |
| CR185-5-3 | 110 | DN 200 | 42,156 | 99143731 |
| CR185-5 | 110 | DN 200 | 42,156 | 99143732 |
| CR185-6-3 | 132 | DN 200 | 47,817 | 99143733 |
| CR185-6 | 132 | DN 200 | 47,817 | 99143734 |
| CR185-7-3 | 160 | DN 200 | POA | 99886987 |
| | | DN 200 | POA | 99886988 |
| CR185-7 | 160 | DN 200 | | |
| CR185-7 CR185-8-3 | 200 | DN 200 | POA | 99921027 |

See previous page for further details.



CATEGORY 2 - CRN 1s 316 STAINLESS STEEL VERTICAL MULTISTAGE PUMPS 50Hz

| | P2 | Pipe | 230V 1ph 50Hz | | 400V 3 ₁ | ph 50Hz |
|------------------|--------------------|------------|---------------|--------------|---------------------|-------------|
| Model | kW | connection | £ | Product Code | £ | Product Cod |
| Pumps with DIN F | langed Connection | | A FGJ H | I E HQQE | A FGJ H | E HQQE |
| CRN 1s-2 | 0.37 | DN 25/32 | 1,337 | 96532058 | 1,287 | 9653123 |
| CRN 1s-3 | 0.37 | DN 25/32 | 1,377 | 96532059 | 1,327 | 9653123 |
| CRN 1s-4 | 0.37 | DN 25/32 | 1,412 | 96532070 | 1,361 | 9653123 |
| CRN 1s-5 | 0.37 | DN 25/32 | 1,449 | 96532071 | 1,399 | 9653123 |
| CRN 1s-6 | 0.37 | DN 25/32 | 1,487 | 96532072 | 1,435 | 9649683 |
| CRN 1s-7 | 0.37 | DN 25/32 | 1,525 | 96532073 | 1,474 | 9653123 |
| CRN 1s-8 | 0.37 | DN 25/32 | 1,562 | 96532074 | 1,512 | 9653123 |
| CRN 1s-9 | 0.37 | DN 25/32 | 1,597 | 96532075 | 1,546 | 964968 |
| CRN 1s-10 | 0.37 | DN 25/32 | 1,634 | 96532076 | 1,583 | 965312 |
| CRN 1s-11 | 0.37 | DN 25/32 | 1,671 | 96532077 | 1,620 | 9653123 |
| CRN 1s-12 | 0.37 | DN 25/32 | 1,709 | 96532078 | 1,658 | 9653124 |
| CRN 1s-13 | 0.37 | DN 25/32 | 1,745 | 96532079 | 1,695 | 964968 |
| CRN 1s-15 | 0.55 | DN 25/32 | 1,810 | 96532140 | 1,739 | 965312 |
| CRN 1s-17 | 0.55 | DN 25/32 | 1,900 | 96532141 | 1,829 | 965312 |
| CRN 1s-19 | 0.55 | DN 25/32 | 1,992 | 96532142 | 1,919 | 965312 |
| CRN 1s-21 | 0.75 | DN 25/32 | 2,201 | 96532143 | 2,074 | 965312 |
| CRN 1s-23 | 0.75 | DN 25/32 | 2,294 | 96532144 | 2,165 | 965312 |
| CRN 1s-25 | 0.75 | DN 25/32 | 2,386 | 96532145 | 2,258 | 965312 |
| CRN 1s-27 | 1.1 | DN 25/32 | 2,574 | 96533330 | 2,366 | 965312 |
| CRN 1s-30 | 1.1 | DN 25/32 | 2,752 | 96533331 | 2,544 | 965312 |
| CRN 1s-33 | 1.1 | DN 25/32 | 2,893 | 96533332 | 2,686 | 965312 |
| CRN 1s-36 | 1.1 | DN 25/32 | 3,032 | 96533333 | 2,824 | 9653125 |
| Pumps with "PJE" | Compatible Connect | ions | A P A E HQQE | | АРАЕ | HQQE |
| CRN 1s-2 | 0.37 | DN 32 | 1,047 | 96532146 | 995 | 9651603 |
| CRN 1s-3 | 0.37 | DN 32 | 1,086 | 96532147 | 1,035 | 965160 |
| CRN 1s-4 | 0.37 | DN 32 | 1,121 | 96532148 | 1,070 | 965160 |
| CRN 1s-5 | 0.37 | DN 32 | 1,159 | 96532149 | 1,108 | 965160 |
| CRN 1s-6 | 0.37 | DN 32 | 1,196 | 96532150 | 1,146 | 965160 |
| CRN 1s-7 | 0.37 | DN 32 | 1,233 | 96532151 | 1,182 | 965160 |
| CRN 1s-8 | 0.37 | DN 32 | 1,271 | 96532152 | 1,220 | 965160 |
| CRN 1s-9 | 0.37 | DN 32 | 1,305 | 96532153 | 1,255 | 965160 |
| CRN 1s-10 | 0.37 | DN 32 | 1,343 | 96532154 | 1,292 | 965160 |
| CRN 1s-11 | 0.37 | DN 32 | 1,379 | 96532155 | 1,329 | 965160 |
| CRN 1s-12 | 0.37 | DN 32 | 1,417 | 96532156 | 1,366 | 965160 |
| CRN 1s-13 | 0.37 | DN 32 | 1,456 | 96532157 | 1,404 | 965160 |
| CRN 1s-15 | 0.55 | DN 32 | 1,518 | 96532158 | 1,447 | 965160 |
| CRN 1s-17 | 0.55 | DN 32 | 1,610 | 96532159 | 1,538 | 965160 |
| CRN 1s-19 | 0.55 | DN 32 | 1,701 | 96532160 | 1,628 | 965160 |
| CRN 1s-21 | 0.75 | DN 32 | 1,912 | 96532161 | 1,783 | 965160 |
| CRN 1s-23 | 0.75 | DN 32 | 2,002 | 96532162 | 1,874 | 965160 |
| CRN 1s-25 | 0.75 | DN 32 | 2,095 | 96532163 | 1,968 | 965160 |
| CRN 1s-27 | 1.1 | DN 32 | 2,282 | 96533334 | 2,074 | 965160 |
| CRN 1s-30 | 1.1 | DN 32 | 2,461 | 96533335 | 2,253 | 965160 |
| CRN 1s-33 | 1.1 | DN 32 | 2,603 | 96533336 | 2,394 | 965160 |
| CDN 1- 2C | 1.1 | DNI33 | 2.742 | 00533337 | 2 522 | 005100 |

2,742

96533337

2,533

96516067

ELECTRIC MOTOR

CRN 1s-36

380-415V 3ph 50Hz

220-240V 1ph 50Hz

IP55 Class F insulation

All 3 Phase motors 0.75kW and above are IE3 Efficiency.

1.1

Please see page 60 for motor retrofit details.

Custom Built pump options; different flanges, seals and elastomers can be configured and priced on request by your Sales Office.

DN 32

PIPE CONNECTIONS

All CRN models are supplied without DIN counter flanges or PJE couplings.

CRN1s DIN Flanged pumps are DN25/32 rated to PN25.

Please see page 46/47 for pipe connection accessories and list prices.

CRN FLANGED pump specification



CATEGORY 2 - CRN 1 316 STAINLESS STEEL VERTICAL MULTISTAGE PUMPS 50Hz

| | P2 | Pipe | 230V 1ph 50Hz | | 400V 3ph 50Hz | |
|------------------|---------------------|------------|---------------|--------------|---------------|--------------|
| Model | kW | connection | £ | Product Code | £ | Product Code |
| Pumps with DIN F | langed Connection | | A FGJ H | H E HQQE | A FGJ H | E HQQE |
| CRN 1-2 | 0.37 | DN 25/32 | 1,337 | 96533054 | 1,287 | 96504923 |
| CRN 1-3 | 0.37 | DN 25/32 | 1,377 | 96533057 | 1,327 | 9653125 |
| CRN 1-4 | 0.37 | DN 25/32 | 1,412 | 96533058 | 1,361 | 9653125 |
| CRN 1-5 | 0.37 | DN 25/32 | 1,449 | 96533060 | 1,399 | 9653125 |
| CRN 1-6 | 0.37 | DN 25/32 | 1,487 | 96533068 | 1,435 | 9653125 |
| CRN 1-7 | 0.37 | DN 25/32 | 1,525 | 96533070 | 1,474 | 9653125 |
| CRN 1-8 | 0.55 | DN 25/32 | 1,570 | 96533072 | 1,498 | 9653125 |
| CRN 1-9 | 0.55 | DN 25/32 | 1,599 | 96533075 | 1,528 | 9653125 |
| CRN 1-10 | 0.55 | DN 25/32 | 1,655 | 96533077 | 1,583 | 9653125 |
| CRN 1-11 | 0.55 | DN 25/32 | 1,709 | 96533079 | 1,637 | 9653125 |
| CRN 1-12 | 0.75 | DN 25/32 | 1,817 | 96533083 | 1,689 | 9653130 |
| CRN 1-13 | 0.75 | DN 25/32 | 1,874 | 96533085 | 1,745 | 9653148 |
| CRN 1-15 | 0.75 | DN 25/32 | 1,984 | 96533087 | 1,855 | 96531482 |
| CRN 1-17 | 1.1 | DN 25/32 | 2,181 | 96533092 | 1,972 | 96531483 |
| CRN 1-19 | 1.1 | DN 25/32 | 2,287 | 96533098 | 2,079 | 96531485 |
| CRN 1-21 | 1.1 | DN 25/32 | 2,400 | 96533099 | 2,192 | 96531486 |
| CRN 1-23 | 1.1 | DN 25/32 | 2,507 | 96533100 | 2,298 | 9653148 |
| CRN 1-25 | 1.5 | DN 25/32 | 2,814 | 96533101 | 2,533 | 96531510 |
| CRN 1-27 | 1.5 | DN 25/32 | 2,923 | 96533102 | 2,644 | 9653151 |
| CRN 1-30 | 1.5 | DN 25/32 | 3,084 | 96533103 | 2,803 | 9653151 |
| CRN 1-33 | 2.2 | DN 25/32 | 3,428 | 96533106 | 3,122 | 96531516 |
| CRN 1-36 | 2.2 | DN 25/32 | 3,588 | 96533107 | 3,283 | 96531519 |
| Pumps with "PJE" | Compatible Connecti | ons | АРА | E HQQE | АРАІ | E HQQE |
| CRN 1-2 | 0.37 | DN 32 | 1,047 | 96533143 | 995 | 96516477 |
| CRN 1-3 | 0.37 | DN 32 | 1,086 | 96533145 | 1,035 | 96516478 |
| CRN 1-4 | 0.37 | DN 32 | 1,121 | 96533146 | 1,070 | 96516480 |
| CRN 1-5 | 0.37 | DN 32 | 1,159 | 96533147 | 1,108 | 9651648 |
| CRN 1-6 | 0.37 | DN 32 | 1,196 | 96533148 | 1,146 | 96516483 |
| CRN 1-7 | 0.37 | DN 32 | 1,233 | 96533149 | 1,182 | 9651648 |
| CRN 1-8 | 0.55 | DN 32 | 1,278 | 96533151 | 1,206 | 96516486 |
| CRN 1-9 | 0.55 | DN 32 | 1,308 | 96533152 | 1,236 | 96516488 |
| CRN 1-10 | 0.55 | DN 32 | 1,363 | 96533153 | 1,292 | 96516489 |
| CRN 1-11 | 0.55 | DN 32 | 1,417 | 96533154 | 1,345 | 96516490 |
| CRN 1-12 | 0.75 | DN 32 | 1,528 | 96533155 | 1,399 | 96516492 |
| CRN 1-13 | 0.75 | DN 32 | 1,583 | 96533157 | 1,456 | 96516493 |
| CRN 1-15 | 0.75 | DN 32 | 1,692 | 96533158 | 1,564 | 9651649 |
| CRN 1-17 | 1.1 | DN 32 | 1,889 | 96533160 | 1,683 | 96516497 |
| CRN 1-19 | 1.1 | DN 32 | 1,997 | 96533161 | 1,789 | 96516498 |
| CRN 1-21 | 1.1 | DN 32 | 2,109 | 96533162 | 1,900 | 96516500 |
| CRN 1-23 | 1.1 | DN 32 | 2,215 | 96533164 | 2,008 | 9651650 |
| CRN 1-25 | 1.5 | DN 32 | 2,523 | 96533166 | 2,242 | 96516503 |
| CRN 1-27 | 1.5 | DN 32 | 2,632 | 96533168 | 2,352 | 96516504 |
| CRN 1-30 | 1.5 | DN 32 | 2,792 | 96533170 | 2,511 | 96516505 |
| CRN 1-33 | 2.2 | DN 32 | 3,136 | 96533171 | 2,833 | 96516506 |

3,297

96533172

2,993

96516507

ELECTRIC MOTOR

CRN 1-36

380-415V 3ph 50Hz

220-240V 1ph 50Hz

IP55 Class F insulation

All 3 Phase motors 0.75kW and above are IE3 Efficiency.

Please see page 60 for motor retrofit details.

Custom Built pump options; different flanges, seals and elastomers can be configured and priced on request by your Sales Office.

DN 32

PIPE CONNECTIONS

All CRN models are supplied without DIN counter flanges or PJE couplings.

CRN1 DIN Flanged pumps are DN25/32 rated to PN25.

Please see page 46/47 for pipe connection accessories and list prices.

CRN FLANGED pump specification



CATEGORY 2 - CRN 3 316 STAINLESS STEEL VERTICAL MULTISTAGE PUMPS 50Hz

| | P2 | Pipe | 230V 1ph 50Hz | | 400V 3ph 50Hz | |
|---------------------|------|------------|---------------|--------------|---------------|--------------|
| Model | kW | connection | £ | Product Code | £ | Product Code |
| Pumps with DIN Flan | | | A FGJ H | E HQQE | A FGJ H | |
| CRN 3-2 | 0.37 | DN 25/32 | 1,366 | 96533230 | 1,317 | 96531531 |
| CRN 3-3 | 0.37 | DN 25/32 | 1,419 | 96533231 | 1,370 | 96531533 |
| CRN 3-4 | 0.37 | DN 25/32 | 1,471 | 96533232 | 1,419 | 96531535 |
| CRN 3-5 | 0.37 | DN 25/32 | 1,525 | 96533233 | 1,474 | 96531537 |
| CRN 3-6 | 0.55 | DN 25/32 | 1,597 | 96533234 | 1,525 | 96531540 |
| CRN 3-7 | 0.55 | DN 25/32 | 1,644 | 96533235 | 1,572 | 96531542 |
| CRN 3-8 | 0.75 | DN 25/32 | 1,732 | 96533236 | 1,604 | 96531544 |
| CRN 3-9 | 0.75 | DN 25/32 | 1,785 | 96533237 | 1,658 | 96531546 |
| CRN 3-10 | 0.75 | DN 25/32 | 1,840 | 96533238 | 1,711 | 96531549 |
| CRN 3-11 | 1.1 | DN 25/32 | 2,010 | 96533239 | 1,801 | 96531571 |
| CRN 3-12 | 1.1 | DN 25/32 | 2,063 | 96533240 | 1,855 | 96531573 |
| CRN 3-13 | 1.1 | DN 25/32 | 2,116 | 96533241 | 1,910 | 96522072 |
| CRN 3-15 | 1.1 | DN 25/32 | 2,229 | 96533242 | 2,021 | 96531576 |
| CRN 3-17 | 1.5 | DN 25/32 | 2,541 | 96533243 | 2,262 | 96531578 |
| CRN 3-19 | 1.5 | DN 25/32 | 2,651 | 96533244 | 2,370 | 96531590 |
| CRN 3-21 | 2.2 | DN 25/32 | 2,752 | 96533245 | 2,448 | 96531592 |
| CRN 3-23 | 2.2 | DN 25/32 | 2,859 | 96533246 | 2,555 | 96531594 |
| CRN 3-25 | 2.2 | DN 25/32 | 2,969 | 96533247 | 2,664 | 96531596 |
| CRN 3-27 | 2.2 | DN 25/32 | 3,078 | 96533248 | 2,774 | 96531598 |
| CRN 3-29 | 2.2 | DN 25/32 | 3,185 | 96533249 | 2,880 | 96531610 |
| CRN 3-31 | 3 | DN 25/32 | - | - | 3,024 | 96531612 |
| CRN 3-33 | 3 | DN 25/32 | - | - | 3,132 | 96531614 |
| CRN 3-36 | 3 | DN 25/32 | - | - | 3,297 | 96531616 |
| | | | | | | |
| Pumps with "PJE" Co | • | | | E HQQE | APAE | |
| CRN 3-2 | 0.37 | DN 32 | 1,076 | 96533250 | 1,025 | 96516897 |
| CRN 3-3 | 0.37 | DN 32 | 1,130 | 96533251 | 1,078 | 96484041 |
| CRN 3-4 | 0.37 | DN 32 | 1,180 | 96496701 | 1,130 | 96516898 |
| CRN 3-5 | 0.37 | DN 32 | 1,233 | 96533252 | 1,182 | 96516899 |
| CRN 3-6 | 0.55 | DN 32 | 1,305 | 96533253 | 1,233 | 96516900 |
| CRN 3-7 | 0.55 | DN 32 | 1,354 | 96533254 | 1,281 | 96493543 |
| CRN 3-8 | 0.75 | DN 32 | 1,442 | 96533255 | 1,313 | 96516901 |
| CRN 3-9 | 0.75 | DN 32 | 1,496 | 96533256 | 1,366 | 96516902 |
| CRN 3-10 | 0.75 | DN 32 | 1,548 | 96533257 | 1,419 | 96499188 |
| CRN 3-11 | 1.1 | DN 32 | 1,719 | 96533258 | 1,512 | 96516903 |
| CRN 3-12 | 1.1 | DN 32 | 1,773 | 96533259 | 1,564 | 96516904 |
| CRN 3-13 | 1.1 | DN 32 | 1,826 | 96533260 | 1,618 | 96516905 |
| CRN 3-15 | 1.1 | DN 32 | 1,938 | 96533261 | 1,729 | 96516906 |
| CRN 3-17 | 1.5 | DN 32 | 2,250 | 96533262 | 1,970 | 96505111 |
| CRN 3-19 | 1.5 | DN 32 | 2,360 | 96533263 | 2,079 | 96516907 |
| CRN 3-21 | 2.2 | DN 32 | 2,461 | 96533264 | 2,157 | 96516908 |
| CRN 3-23 | 2.2 | DN 32 | 2,567 | 96533265 | 2,264 | 96516909 |
| CRN 3-25 | 2.2 | DN 32 | 2,678 | 96533266 | 2,373 | 96516910 |
| CRN 3-27 | 2.2 | DN 32 | 2,787 | 96533267 | 2,482 | 96516911 |
| CRN 3-29 | 2.2 | DN 32 | 2,893 | 96533268 | 2,590 | 96516912 |
| CRN 3-31 | 3 | DN 32 | - | - | 2,734 | 96516913 |
| CRN 3-33 | 3 | DN 32 | - | - | 2,840 | 96516914 |
| CRN 3-36 | 3 | DN 32 | - | <u>-</u> | 3,005 | 96516915 |

ELECTRIC MOTOR

380-415V 3ph 50Hz

220-240V 1ph 50Hz

IP55 Class F insulation

All 3 Phase motors 0.75kW and above are IE3 Efficiency.

Please see page 60 for motor retrofit details.

Custom Built pump options; different flanges, seals and elastomers can be configured and priced on request by your Sales Office.

PIPE CONNECTIONS

All CRN models are supplied without DIN counter flanges or PJE couplings.

CRN3 DIN Flanged pumps are DN25 rated to PN25.

Please see page 46/47 for pipe connection accessories and list prices.

CRN FLANGED pump specification



CATEGORY 2 - CRN 5 316 STAINLESS STEEL VERTICAL MULTISTAGE PUMPS 50Hz

| | P2 | Pipe | 230V 1ph 50Hz | | 400V 3ph 50Hz | |
|----------------------|---------------------|----------------|---------------|--------------|---------------|--------------|
| Model | kW | connection | £ | Product Code | £ | Product Code |
| Pumps with DIN I | Flanged Connection | | A FGJ H | E HQQE | A FGJ H | E HQQE |
| CRN 5-2 | 0.37 | DN 25/32 | 1,465 | 96533292 | 1,415 | 96531650 |
| CRN 5-3 | 0.55 | DN 25/32 | 1,534 | 96533293 | 1,463 | 96531651 |
| CRN 5-4 | 0.55 | DN 25/32 | 1,622 | 96533294 | 1,550 | 96531652 |
| CRN 5-5 | 0.75 | DN 25/32 | 1,784 | 96533295 | 1,658 | 96531653 |
| CRN 5-6 | 1.1 | DN 25/32 | 1,889 | 96533296 | 1,680 | 96531654 |
| CRN 5-7 | 1.1 | DN 25/32 | 1,948 | 96533297 | 1,740 | 96531655 |
| CRN 5-8 | 1.1 | DN 25/32 | 2,001 | 96533298 | 1,793 | 96531656 |
| CRN 5-9 | 1.5 | DN 25/32 | 2,320 | 96533299 | 2,041 | 96531657 |
| CRN 5-10 | 1.5 | DN 25/32 | 2,373 | 96533300 | 2,094 | 96531658 |
| CRN 5-11 | 2.2 | DN 25/32 | 2,574 | 96533301 | 2,270 | 96531659 |
| CRN 5-12 | 2.2 | DN 25/32 | 2,630 | 96533302 | 2,326 | 96531670 |
| CRN 5-13 | 2.2 | DN 25/32 | 2,682 | 96533303 | 2,379 | 96531671 |
| CRN 5-14 | 2.2 | DN 25/32 | 2,736 | 96533304 | 2,433 | 96531672 |
| CRN 5-15 | 2.2 | DN 25/32 | 2,790 | 96533305 | 2,486 | 96531673 |
| CRN 5-16 | 2.2 | DN 25/32 | 2,842 | 96533306 | 2,539 | 96531674 |
| CRN 5-18 | 3 | DN 25/32 | - | - | 2,794 | 96531675 |
| CRN 5-20 | 3 | DN 25/32 | - | - | 2,902 | 96531676 |
| CRN 5-22 | 4 | DN 25/32 | - | - | 2,993 | 96531677 |
| CRN 5-24 | 4 | DN 25/32 | - | - | 3,099 | 96531678 |
| CRN 5-26 | 4 | DN 25/32 | - | - | 3,208 | 96531679 |
| CRN 5-29 | 4 | DN 25/32 | - | - | 3,370 | 96531680 |
| CRN 5-32 | 5.5 | DN 25/32 | - | - | 3,800 | 96531681 |
| CRN 5-36 | 5.5 | DN 25/32 | - | - | 4,019 | 96531682 |
| • | Compatible Connecti | | A P A E | | A P A E | |
| CRN 5-2 | 0.37 | DN 32 | 1,174 | 96533307 | 1,125 | 96517239 |
| CRN 5-3 | 0.55 | DN 32 | 1,244 | 96533308 | 1,172 | 96517240 |
| CRN 5-4 | 0.55 | DN 32 | 1,332 | 96533309 | 1,260 | 96517241 |
| CRN 5-5 | 0.75 | DN 32 | 1,495 | 96533310 | 1,366 | 96517242 |
| CRN 5-6 | 1.1 | DN 32 | 1,598 | 96533311 | 1,391 | 96517243 |
| CRN 5-7 | 1.1 | DN 32 | 1,658 | 96533312 | 1,449 | 96517244 |
| CRN 5-8 | 1.1 | DN 32 | 1,710 | 96533313 | 1,503 | 96517245 |
| CRN 5-9 | 1.5 | DN 32 | 2,029 | 96533314 | 1,750 | 96517246 |
| CRN 5-10 | 1.5 | DN 32 | 2,084 | 96533315 | 1,805 | 96492985 |
| CRN 5-11 | 2.2 | DN 32 | 2,283 | 96533316 | 1,980 | 96517247 |
| CRN 5-12 | 2.2 | DN 32 | 2,339 | 96533317 | 2,036 | 96517248 |
| CRN 5-13 | 2.2 | DN 32 | 2,392 | 96533318 | 2,088 | 96517249 |
| CRN 5-14 | 2.2 | DN 32 | 2,445 | 96533319 | 2,142 | 96517250 |
| CRN 5-15 | 2.2 | DN 32 | 2,499 | 96533320 | 2,196 | 96517251 |
| CRN 5-16 | 2.2 | DN 32 | 2,551 | 96533321 | 2,248 | 96517252 |
| CRN 5-18 | 3 | DN 32 | | - | 2,505 | 96517253 |
| CRN 5-20 | <u>3</u> | DN 32 | - | - | 2,611 | 96517254 |
| CRN 5-22 | | DN 32 | - | - | 2,702 | 96513490 |
| CRN 5-24 | 4 | DN 32 | - | - | 2,808 | 96513491 |
| CRN 5-26 | 4 | DN 32 | - | - | 2,917 | 96513492 |
| CRN 5-29 | 4 | DN 32 | - | - | 3,080 | 96513493 |
| CRN 5-32 CRN 5-36 | 5.5 5.5 | DN 32 DN 32 | - | - | 3,509 | 96513494 |
| | 5.5 | בי ואנו | - | _ | 3,728 | 96513495 |

ELECTRIC MOTOR

380-415V 3ph 50Hz

220-240V 1ph 50Hz

IP55 Class F insulation

All 3 Phase motors 0.75kW and above are IE3 Efficiency.

Please see page 60 for motor retrofit details.

Custom Built pump options; different flanges, seals and elastomers can be configured and priced on request by your Sales Office.

PIPE CONNECTIONS

All CRN models are supplied ${\bf without}\ {\sf DIN}\ counter\ flanges\ or\ {\sf PJE}\ couplings.$

CRN5 DIN Flanged pumps are DN32 rated to PN25.

Please see page 46/47 for pipe connection accessories and list prices.

CRN FLANGED pump specification



CATEGORY 2 - CRN10 to CRN15 316 STAINLESS STEEL VERTICAL MULTISTAGE PUMPS 50Hz

COMPLETE WITH DIRECT COUPLED 2900 RPM ELECTRIC MOTOR

| | P2 | Pipe | 22014 | 1.500 | ****** | |
|------------------------|------------------------------|----------------|--------------|----------------|----------------|------------------------|
| Model | kW | connection | £ | £ Product Code | | h 50Hz Product Code |
| Pumps with "PJE" | Compatible Connection | s | | HQQE | £ APAE | |
| CRN 10-1 | 0.37 | DN 40 | 1,618 | 96500897 | 1,568 | 96501040 |
| CRN 10-2 | 0.75 | DN 40 | 1,805 | 96500898 | 1,676 | 96501041 |
| CRN 10-3 | 1.1 | DN 40 | 2,125 | 96500899 | 1,916 | 96501042 |
| CRN 10-4 | 1.5 | DN 40 | 2,347 | 96500900 | 2,067 | 96501043 |
| CRN 10-5 | 2.2 | DN 40 | 2,560 | 96500901 | 2,255 | 96501044 |
| CRN 10-6 CRN 10-7 | 2.2 3 | DN 40 DN 40 | 2,709 | 96500902 | 2,405 | 96501045 |
| CRN 10-7 | 3 | DN 40 | - | <u> </u> | 2,587 2,722 | 96501046 96501047 |
| CRN 10-8 | 3 | DN 40 | | | 2,873 | 96501048 |
| CRN 10-10 | 4 | DN 40 | - | - | 3,251 | 96501281 |
| CRN 10-12 | 4 | DN 40 | - | = | 3,508 | 96501282 |
| CRN 10-14 | 5.5 | DN 40 | - | - | 4,090 | 96501283 |
| CRN 10-16 | 5.5 | DN 40 | - | - | 4,340 | 96501284 |
| CRN 10-18 | 7.5 | DN 40 | - | = | 4,720 | 96501285 |
| CRN 10-20 | 7.5 | DN 40 | - | - | 4,978 | 96501286 |
| CRN 10-22 | 7.5 | DN 40 | - | - | 5,227 | 96501287 |
| Pumps with DIN Fl | anged Connection | | A FGJ H | E HQQE | A FGJ H E | HQQE |
| CRN 10-1 | 0.37 | DN 50 | 2,049 | 96527731 | 1,997 | 96527737 |
| CRN 10-2 | 0.75 | DN 50 | 2,234 | 96527732 | 2,107 | 96527740 |
| CRN 10-3 | 1.1 | DN 50 | 2,555 | 96527733 | 2,347 | 96527741 |
| CRN 10-4 | 1.5 | DN 50 | 2,776 | 96527734 | 2,495 | 96527743 |
| CRN 10-5 | 2.2 | DN 50 | 2,990 | 96527735 | 2,686 | 96527744 |
| CRN 10-6 | 2.2 | DN 50 | 3,140 | 96527736 | 2,835 | 96527745 |
| CRN 10-7 | 3 | DN 50 | | <u>-</u> | 3,016 | 96527747 |
| CRN 10-8 | 3 | DN 50 | - | - | 3,153 | 96527748 |
| CRN 10-9 | 3 | DN 50 | | <u> </u> | 3,301 | 96527749 |
| CRN 10-10 | 4 | DN 50 | | <u>-</u> | 3,681 | 96527750 |
| CRN 10-12 CRN 10-14 | 5.5 | DN 50 DN 50 | <u> </u> | <u> </u> | 3,938 4,519 | 96527751 97509478 |
| CRN 10-14 CRN 10-16 | 5.5 | DN 50 | | | 4,771 | 96527753 |
| CRN 10-18 | 7.5 | DN 50 | | | 5,148 | 96527755 |
| CRN 10-20 | 7.5 | DN 50 | | - | 5,408 | 96527756 |
| CRN 10-22 | 7.5 | DN 50 | - | - | 5,657 | 96527758 |
| Down with IIDIEII | C | | A.D.A.F | . 1100 | A D A E | шоог |
| CRN 15-1 | Compatible Connection 1.1 | DN 50 | 2,215 | 96501675 | 2,010 | 96501756 |
| CRN 15-1 | 2.2 | DN 50 | 2,706 | 96501676 | 2,407 | 96501757 |
| CRN 15-3 | 3 | DN 50 | | - | 2,759 | 96501758 |
| CRN 15-4 | 4 | DN 50 | - | - | 3,194 | 96501949 |
| CRN 15-5 | 4 | DN 50 | | _ | 3,374 | 96501950 |
| CRN 15-6 | 5.5 | DN 50 | - | - | 4,007 | 96501951 |
| CRN 15-7 | 5.5 | DN 50 | - | - | 4,188 | 96501952 |
| CRN 15-8 | 7.5 | DN 50 | - | - | 4,861 | 96501953 |
| CRN 15-9 | 7.5 | DN 50 | - | - | 5,042 | 96501954 |
| CRN 15-10 | 11 | DN 50 | - | - | 5,862 | 96501955 |
| CRN 15-12 | 11 | DN 50 | - | = | 6,224 | 96501956 |
| CRN 15-14 | 11 | DN 50 | - | - | 6,582 | 96501957 |
| CRN 15-17 | 15 | DN 50 | - | - | 8,423 | 96501958 |
| Pumps with DIN Fl | | | | E HQQE | A FGJ H E | |
| CRN 15-1 | 1.1 | DN 50 | 2,638 | 96527776 | 2,434 | 96527779 |
| CRN 15-2 | 2.2 | DN 50 | 3,130 | 96527777 | 2,829 | 96527782 |
| CRN 15-3 | 3 | DN 50 | - | = | 3,183 | 96527783 |
| CRN 15-4 | 4 | DN 50 | - | - | 3,618 | 96527785 |
| CRN 15-5 | 4 | DN 50 | - | - | 3,797 | 96527786 |
| CRN 15-6 CRN 15-7 | 5.5 5.5 | DN 50 DN 50 | - | <u> </u> | 4,430 | 96527788 |
| CRN 15-7 CRN 15-8 | 7.5 | DN 50 | | <u>-</u> | 4,612 5,284 | 96527789 96527790 |
| CRN 15-8 | 7.5 | DN 50 | <u> </u> | <u> </u> | 5,466 | 96527791 |
| CRN 15-10 | 11 | DN 50 | <u> </u> | | 6,286 | 96527792 |
| CRN 15-12 | 11 | DN 50 | | - | 6,648 | 96527793 |
| CRN 15-14 | 11 | DN 50 | - | - | 7,005 | 96527794 |
| CRN 15-17 | 15 | DN 50 | - | <u> </u> | 8,848 | 96527796 |
| | | | · | | | |

Motor specification, reference to accessories and operational details are on page 34.



CATEGORY 2 - CRN20 316 STAINLESS STEEL VERTICAL MULTISTAGE PUMPS 50Hz

COMPLETE WITH DIRECT COUPLED 2900 RPM ELECTRIC MOTOR

| | P2 | Pipe |
|------------------|---------------------|------------|
| Model | kW | connection |
| | | |
| Pumps with "PJE" | Compatible Connecti | ons |
| CRN 20-1 | 1.1 | DN 50 |
| CRN 20-2 | 2.2 | DN 50 |
| CRN 20-3 | 4 | DN 50 |
| CRN 20-4 | 5.5 | DN 50 |
| CRN 20-5 | 5.5 | DN 50 |
| CRN 20-6 | 7.5 | DN 50 |
| CRN 20-7 | 7.5 | DN 50 |
| CRN 20-8 | 11 | DN 50 |
| CRN 20-10 | 11 | DN 50 |
| CRN 20-12 | 15 | DN 50 |
| CRN 20-14 | 15 | DN 50 |
| CRN 20-17 | 18.5 | DN 50 |

| 230V | 230V 1ph 50Hz | | | | |
|-------|---------------|--|--|--|--|
| £ | Product Code | | | | |
| APA | E HQQE | | | | |
| 2,262 | 96500304 | | | | |
| 2,759 | 96500305 | | | | |
| - | = | | | | |
| - | = | | | | |
| - | = | | | | |
| - | = | | | | |
| - | = | | | | |
| - | = | | | | |
| - | = | | | | |
| - | - | | | | |
| - | - | | | | |
| = | = | | | | |
| | _ | | | | |

| £ Product Cod A P A E HQQE 2,057 9650038 2,459 9650038 3,450 9650055 4,094 9650056 |
|--|
| 2,057 9650038 2,459 9650038 3,450 9650055 4,094 9650056 |
| 2,459 9650038 3,450 9650055 4,094 9650056 |
| 3,450 9650055 4,094 9650056 |
| 4,094 9650056 |
| , |
| 4 202 |
| 4,282 9650056 |
| 4,968 9650056 |
| 5,155 9650056 |
| 6,361 9650056 |
| 6,727 9650056 |
| 8,246 9650056 |
| 8,609 9650056 |
| 10,224 9650056 |

| Pumps with DIN Flanged Connection | | | | |
|-----------------------------------|------|-------|--|--|
| CRN 20-1 | 1.1 | DN 50 | | |
| CRN 20-2 | 2.2 | DN 50 | | |
| CRN 20-3 | 4.0 | DN 50 | | |
| CRN 20-4 | 5.5 | DN 50 | | |
| CRN 20-5 | 5.5 | DN 50 | | |
| CRN 20-6 | 7.5 | DN 50 | | |
| CRN 20-7 | 7.5 | DN 50 | | |
| CRN 20-8 | 11 | DN 50 | | |
| CRN 20-10 | 11 | DN 50 | | |
| CRN 20-12 | 15 | DN 50 | | |
| CRN 20-14 | 15 | DN 50 | | |
| CRN 20-17 | 18.5 | DN 50 | | |

| A FGJ H E | HQQE |
|-----------|----------|
| 2,686 | 96527799 |
| 3,184 | 96527801 |
| = | - |
| = | - |
| = | - |
| = | - |
| = | = |
| = | = |
| = | = |
| = | = |
| = | = |
| = | = |
| | <u> </u> |

| A FGJ H E HQQE | |
|----------------|----------|
| 2,480 | 96527802 |
| 2,882 | 96527805 |
| 3,873 | 96527807 |
| 4,518 | 96527808 |
| 4,705 | 96527809 |
| 5,391 | 96527811 |
| 5,579 | 96527813 |
| 6,784 | 96527815 |
| 7,150 | 96527817 |
| 8,671 | 96527818 |
| 9,033 | 96527819 |
| 10,648 | 96527820 |
| | |

ELECTRIC MOTOR

380-415V 3ph 50Hz

220-240V 1ph 50Hz

IP55 Class F insulation

All 3 Phase motors 0.75kW and above are IE3 Efficiency.

Please see page 60 for motor retrofit details.

Custom Built pump options; different flanges, seals and elastomers can be configured and priced on request by your Sales Office.

PIPE CONNECTION

All CRN models are supplied $\mbox{\it without}$ DIN counter flanges or PJE Couplings.

All flanged CRN models (FGJ version) are DIN flanged as standard and are supplied without the counter flanges to EN 1092-2 1997.

Please see page 46/47 for pipe connection accessories and list prices.

Pump housing flanged to the following as standard.

CRN 10: DN 40 rated to PN 25.

CRN 15: DN 50 rated to PN 25.

CRN 20: DN 50 rated to PN 25.

CRN FLANGED pump specification



CATEGORY 2 - CRN32 & CRN45 316 St St VERTICAL MULTISTAGE PUMPS 50Hz

COMPLETE WITH DIRECT COUPLED 2900 RPM ELECTRIC MOTOR

| | P2 | Pipe |
|---|----------------|-------------|
| Model | kW | connection |
| CRN 32-1-1 | 1.5 | DN 65 |
| CRN 32-1 | 2.2 | DN 65 |
| CRN 32-2-2 | 3 | DN 65 |
| CRN 32-2 | 4 | DN 65 |
| CRN 32-3-2 | 5.5 | DN 65 |
| CRN 32-3 | 5.5 | |
| | | DN 65 |
| CRN 32-4-2 | 7.5 | DN 65 |
| CRN 32-4 | 7.5 | DN 65 |
| CRN 32-5-2 | 11 | DN 65 |
| CRN 32-5 | 11 | DN 65 |
| CRN 32-6-2 | 11 | DN 65 |
| CRN 32-6 | 11 | DN 65 |
| CRN 32-7-2 | 15 | DN 65 |
| CRN 32-7 | 15 | DN 65 |
| CRN 32-8-2 | 15 | DN 65 |
| CRN 32-8 | 15 | DN 65 |
| CRN 32-9-2 | 18.5 | DN 65 |
| CRN 32-9 | 18.5 | DN 65 |
| CRN 32-10-2 | 18.5 | DN 65 |
| CRN 32-10 | 18.5 | DN 65 |
| CRN 32-11-2 | 22 | DN 65 |
| CRN 32-11 | 22 | DN 65 |
| CRN 32-12-2 | 22 | DN 65 |
| RN 32-12 | 22 | DN 65 |
| CRN 32-13-2 | 30 | DN 65 |
| RN 32-13 | 30 | DN 65 |
| CRN 32-14-2 | 30 | DN 65 |
| CRN 32-14 | 30 | DN 65 |
| | | |
| CRN 45-1-1 | 3 | DN 80 |
| RN 45-1 | 4 | DN 80 |
| RN 45-2-2 | 5.5 | DN 80 |
| RN 45-2 | 7.5 | DN 80 |
| CRN 45-3-2 | 11 | DN 80 |
| CRN 45-3 | 11 | DN 80 |
| CRN 45-4-2 | 15 | DN 80 |
| CRN 45-4 | 15 | DN 80 |
| CRN 45-5-2 | 18.5 | DN 80 |
| CRN 45-5 | 18.5 | DN 80 |
| CRN 45-6-2 | 22 | DN 80 |
| CRN 45-6-2 | 22 | DN 80 |
| CRN 45-7-2 | 30 | DN 80 |
| CRN 45-7-2 | 30 | |
| CRN 45-7 | 30 | DN 80 DN 80 |
| | | DN 80 |
| CRN 45-8 | 30 | |
| CRN 45-9-2 | 30 | DN 80 |
| CRN 45-9 | 37 | DN 80 |
| CRN 45-10-2 | 37 | DN 80 |
| CRN 45-10 | 37 | DN 80 |
| CRN 45-11-2 | 45 | DN 80 |
| CRN 45-11 | 45 | DN 80 |
| | | DN 00 |
| CRN 45-12-2 | 45 | DN 80 |
| CRN 45-12-2 CRN 45-12 CRN 45-13-2 | 45 45 45 | DN 80 DN 80 |

| | oduct Code |
|---|--|
| A F H E HQQE | |
| 3,832 | 96536094 |
| 4,031 | 96536114 |
| 4,398 | 96536115 |
| 4,796 | 96536116 |
| 5,681 | 96536119 |
| 5,681 | 96536130 |
| 6,776 | 96536131 |
| 6,776 | 96536132 |
| 8,241 | 96536133 |
| 8,241 | 96571672 |
| · | 96536136 |
| 8,607 | |
| 8,607 | 96536138 |
| 10,090 | 96536143 |
| 10,090 | 96536145 |
| 10,440 | 96536146 |
| 10,440 | 96536148 |
| 11,737 | 96536150 |
| 11,737 | 96536152 |
| 12,087 | 96536154 |
| 12,087 | 96536156 |
| 13,492 | 96536158 |
| 13,492 | 96536159 |
| 13,841 | 96536160 |
| | 96536162 |
| 13,841 | |
| 15,262 | 96536163 |
| 15,262 | 96633659 |
| 15,627 | 96536377 |
| 15,627 | 96536379 |
| A F H E HQQE | |
| ATTICIQUE | |
| 4,398 | 96536405 |
| | 96536405 96536412 |
| 4,398 | |
| 4,398 4,982 5,779 | 96536412 |
| 4,398 4,982 5,779 6,776 | 96536412 96536416 96536421 |
| 4,398 4,982 5,779 6,776 8,257 | 96536412 96536416 96536421 96536423 |
| 4,398 4,982 5,779 6,776 8,257 8,257 | 96536412 96536416 96536421 96536423 96536424 |
| 4,398 4,982 5,779 6,776 8,257 8,257 10,108 | 96536412 96536416 96536421 96536423 96536424 96610965 |
| 4,398 4,982 5,779 6,776 8,257 8,257 10,108 10,108 | 96536412 96536421 96536423 96536424 96610965 96691398 |
| 4,398 4,982 5,779 6,776 8,257 8,257 10,108 10,108 11,706 | 96536412 96536416 96536421 96536423 96536424 96610965 96691398 96691399 |
| 4,398 4,982 5,779 6,776 8,257 8,257 10,108 10,108 11,706 11,706 | 96536412 96536421 96536423 96536424 96610965 96691398 96691399 96560711 |
| 4,398 4,982 5,779 6,776 8,257 8,257 10,108 10,108 11,706 11,706 13,279 | 96536412 96536421 96536423 96536424 96610965 96691398 96691399 96560711 96536457 |
| 4,398 4,982 5,779 6,776 8,257 8,257 10,108 10,108 11,706 11,706 13,279 13,279 | 96536412 96536416 96536421 96536423 96536424 96610965 96691398 96691399 96560711 96536457 96536458 |
| 4,398 4,982 5,779 6,776 8,257 8,257 10,108 10,108 11,706 11,706 13,279 | 96536412 96536421 96536423 96536424 96610965 96691398 96691399 96560711 96536457 96536458 96536459 |
| 4,398 4,982 5,779 6,776 8,257 8,257 10,108 10,108 11,706 11,706 13,279 13,279 | 96536412 96536416 96536421 96536423 96536424 96610965 96691398 96691399 96560711 96536457 96536458 |
| 4,398 4,982 5,779 6,776 8,257 8,257 10,108 10,108 11,706 11,706 13,279 13,279 14,663 | 96536412 96536421 96536423 96536424 96610965 96691398 96691399 96560711 96536457 96536458 96536459 |
| 4,398 4,982 5,779 6,776 8,257 8,257 10,108 10,108 11,706 11,706 13,279 13,279 14,663 14,663 | 96536412 96536416 96536421 96536423 96536424 96610965 96691398 96560711 96536457 96536458 96536459 |
| 4,398 4,982 5,779 6,776 8,257 8,257 10,108 10,108 11,706 11,706 13,279 13,279 14,663 14,663 15,041 | 96536412 96536421 96536423 96536424 96610965 96691398 96691399 96560711 96536457 96536458 96536459 |
| 4,398 4,982 5,779 6,776 8,257 8,257 10,108 10,108 11,706 11,706 13,279 13,279 14,663 14,663 15,041 | 96536412 96536421 96536423 96536424 96610965 96691398 96691399 96560711 96536457 96536458 96536459 96536460 96536461 |
| 4,398 4,982 5,779 6,776 8,257 8,257 10,108 10,108 11,706 11,706 13,279 13,279 14,663 14,663 15,041 15,041 15,041 15,0424 16,643 | 96536412 96536421 96536423 96536424 96610965 96691398 96691399 96560711 96536457 96536458 96536460 96536461 96536462 96536463 |
| 4,398 4,982 5,779 6,776 8,257 8,257 10,108 10,108 11,706 11,706 13,279 13,279 14,663 14,663 15,041 15,041 15,041 15,424 16,643 17,003 | 96536412 96536421 96536423 96536424 96610965 96691398 96691399 96536457 96536458 96536459 96536460 96536461 96536463 96536464 96536465 |
| 4,398 4,982 5,779 6,776 8,257 8,257 10,108 10,108 11,706 11,706 13,279 13,279 14,663 14,663 15,041 15,041 15,041 15,424 16,643 17,003 | 96536412 96536421 96536423 96536424 96610965 96691398 96691399 96536457 96536458 96536459 96536460 96536461 96536462 96536464 96536465 96536466 |
| 4,398 4,982 5,779 6,776 8,257 8,257 10,108 10,108 11,706 11,706 13,279 13,279 14,663 14,663 15,041 15,041 15,041 15,424 16,643 17,003 17,003 21,484 | 96536412 96536421 96536424 96610965 96691398 96691399 96560711 96536457 96536459 96536460 96536461 96536462 96536463 96536464 96536465 96536466 96536466 |
| 4,398 4,982 5,779 6,776 8,257 8,257 10,108 10,108 11,706 13,279 13,279 14,663 14,663 15,041 15,041 15,424 16,643 17,003 17,003 21,484 21,484 | 96536412 96536421 96536424 96610965 96691398 96691399 96560711 96536457 96536458 96536460 96536461 96536462 96536464 96536464 96536465 96536469 96536469 |
| 4,398 4,982 5,779 6,776 8,257 8,257 10,108 10,108 11,706 11,706 13,279 13,279 14,663 14,663 15,041 15,041 15,424 16,643 17,003 17,003 21,484 21,484 21,952 | 96536412 96536421 96536423 96536424 96610965 96691399 96590711 96536457 96536459 96536460 96536461 96536462 96536464 96536465 96536466 96536466 96536469 96536469 96536469 |
| 4,398 4,982 5,779 6,776 8,257 8,257 10,108 10,108 11,706 11,706 13,279 13,279 14,663 14,663 15,041 15,041 15,424 16,643 17,003 17,003 21,484 21,484 21,952 21,952 | 96536412 96536421 96536423 96536424 96610965 96691398 96691399 96536457 96536458 96536459 96536461 96536462 96536463 96536465 96536465 96536465 96536469 96536690 96536691 |
| 4,398 4,982 5,779 6,776 8,257 8,257 10,108 10,108 11,706 11,706 13,279 13,279 14,663 14,663 15,041 15,041 15,424 16,643 17,003 17,003 21,484 21,484 21,952 | 96536412 96536421 96536423 96536424 96610965 96691399 96590711 96536457 96536459 96536460 96536461 96536462 96536464 96536465 96536466 96536466 96536469 96536469 96536469 |

380-415V 3ph 50Hz

ELECTRIC MOTOR

380-415V 3ph 50Hz

IP55 Class F insulation

All 3 Phase motors 0.75kW and above are IE3 Efficiency.

Please see page 60 for motor retrofit details.

Custom Built pump options; different flanges, seals and elastomers can be configured and priced on request by your Sales Office.

PIPE CONNECTIONS

Large CRN models are DIN flanged as standard and supplied without the counter flanges to EN 1092-2 1997 [BS4504] Pump housing flanged to the following as standard - check PN pressure rating.

CRN 32: DN65 --- PN16/PN25/PN40 dependant on model.

CRN 45: DN80 --- PN16/PN25/PN40 dependant on model.

CRN 64: DN100 --- PN16/PN25/PN40 dependant on model.

CRN95: DN100 --- PN16, PN25/40 dependant on model.

CRN125, CRN155: DN150 --- PN16, PN25/40 dependant on model.

Please see page 46/47 for pipe connection accessories and list prices.



CATEGORY 2 - CRN64, CRN95, CRN125 & CRN155 316 St St VERTICAL MULTISTAGE PUMPS 50Hz

COMPLETE WITH DIRECT COUPLED 2900 RPM ELECTRIC MOTOR

| | | | 380-415V 3pi | |
|-------------|------|------------|--------------|--------------|
| | P2 | Pipe | £ | Product Code |
| Model | kW | connection | A F H E HC | |
| CRN 64-1-1 | 4 | DN 100 | 5,082 | 96536483 |
| CRN 64-1 | 5.5 | DN 100 | 5,904 | 96536484 |
| CRN 64-2-2 | 7.5 | DN 100 | 6,892 | 96536491 |
| CRN 64-2-1 | 11 | DN 100 | 7,945 | 96536493 |
| CRN 64-2 | 11 | DN 100 | 7,945 | 96536497 |
| CRN 64-3-2 | 15 | DN 100 | 9,923 | 96641864 |
| CRN 64-3-1 | 15 | DN 100 | 9,923 | 96692772 |
| CRN 64-3 | 18.5 | DN 100 | 11,134 | 96620760 |
| CRN 64-4-2 | 18.5 | DN 100 | 11,555 | 96692774 |
| CRN 64-4-1 | 22 | DN 100 | 12,774 | 96536506 |
| CRN 64-4 | 22 | DN 100 | 12,774 | 96536508 |
| CRN 64-5-2 | 30 | DN 100 | 13,727 | 96536510 |
| CRN 64-5-1 | 30 | DN 100 | 13,727 | 96536512 |
| CRN 64-5 | 30 | DN 100 | 13,727 | 96536513 |
| CRN 64-6-2 | 30 | DN 100 | 14,152 | 96536515 |
| CRN 64-6-1 | 37 | DN 100 | 16,366 | 96536517 |
| CRN 64-6 | 37 | DN 100 | 16,366 | 96536524 |
| CRN 64-7-2 | 37 | DN 100 | 16,751 | 96536529 |
| CRN 64-7-1 | 37 | DN 100 | 16,751 | 96536530 |
| CRN 64-7 | 45 | DN 100 | 21,748 | 96536694 |
| CRN 64-8-2 | 45 | DN 100 | 22,116 | 96536696 |
| CRN 64-8-1 | 45 | DN 100 | 22,116 | 96536697 |
| | | | A F A E HC | |
| CRN 95-1-1 | 5.5 | DN 100 | 6,174 | 99141757 |
| CRN 95-1 | 7.5 | DN 100 | 7,600 | 99141758 |
| CRN 95-2-2 | 11 | DN 100 | 9,733 | 99141759 |
| CRN 95-2 | 15 | DN 100 | 12,122 | 99141760 |
| CRN 95-3-2 | 18.5 | DN 100 | 13,667 | 99141761 |
| CRN 95-3 | 22 | DN 100 | 15,285 | 99141762 |
| CRN 95-4 | 30 | DN 100 | 17,037 | 99141763 |
| CRN 95-5 | 37 | DN 100 | 19,542 | 99141764 |
| CRN 95-6 | 45 | DN 100 | 24,542 | 99141765 |
| CRN 95-7 | 55 | DN 100 | 29,412 | 99141766 |
| CRN 95-8-2 | 55 | DN 100 | 30,112 | 99141767 |
| CRIN 95-8-2 | 55 | DN 100 | A F A E HC | |
| CDN 135 1 | 11 | DN 150 | | |
| CRN 125-1 | 11 | DN 150 | 9,917 | 99142641 |
| CRN 125-2-2 | 15 | DN 150 | 12,350 | 99142642 |
| CRN 125-2-1 | 18.5 | DN 150 | 14,469 | 99142643 |
| CRN 125-2 | 22 | DN 150 | 16,185 | 99142644 |
| CRN 125-3-1 | 30 | DN 150 | 17,354 | 99142645 |
| CRN 125-3 | 37 | DN 150 | 19,530 | 99142646 |
| CRN 125-4-2 | 37 | DN 150 | 20,400 | 99142647 |
| CRN 125-4 | 45 | DN 150 | 24,834 | 99142648 |
| CRN 125-5 | 55 | DN 150 | 30,465 | 99142649 |
| CRN 125-6 | 75 | DN 150 | 36,913 | 99142651 |
| CRN 125-7 | 75 | DN 150 | 37,780 | 99142652 |
| CRN 125-8 | 90 | DN 150 | 39,996 | 99142653 |
| CRN 125-9-2 | 90 | DN 150 | 40,866 | 99142654 |
| CRN 125-9 | 110 | DN 150 | 46,406 | 99142655 |
| CRN 125-10 | 110 | DN 150 | 47,275 | 99142657 |
| | | | A F A E HC | QE |
| CRN 155-1-1 | 11 | DN 150 | 9,882 | 99143269 |
| CRN 155-1 | 15 | DN 150 | 12,304 | 99143270 |
| CRN 155-2-2 | 22 | DN 150 | 16,124 | 99143271 |
| CRN 155-2 | 30 | DN 150 | 17,290 | 99143272 |
| CRN 155-3-2 | 37 | DN 150 | 20,325 | 99143273 |
| CRN 155-3 | 45 | DN 150 | 24,743 | 99143274 |
| CRN 155-4-1 | 55 | DN 150 | 29,869 | 99143275 |
| CRN 155-5-2 | 75 | DN 150 | 37,642 | 99143276 |
| CRN 155-5 | 75 | DN 150 | 37,642 | 99143277 |
| CRN 155-6 | 90 | DN 150 | 41,733 | 99143279 |
| CRN 155-7 | 110 | DN 150 | 46,236 | 99143280 |
| CRN 155-8-2 | 110 | DN 150 | 47,103 | 99143281 |
| | | | | |

Motor specification, reference to accessories and operational details are on page 37.



380-415V 3ph 50Hz

CATEGORY 2 - CRN185 316 St St VERTICAL MULTISTAGE PUMPS 50Hz

COMPLETE WITH DIRECT COUPLED 2900 RPM ELECTRIC MOTOR

| | P2 | Pipe |
|-------------|------|------------|
| Model | kW | connection |
| CRN 185-1-1 | 18.5 | DN 200 |
| CRN 185-1 | 22 | DN 200 |
| CRN 185-2-2 | 37 | DN 200 |
| CRN 185-2 | 45 | DN 200 |
| CRN 185-3-3 | 55 | DN 200 |
| CRN 185-3 | 75 | DN 200 |
| CRN 185-4-3 | 75 | DN 200 |
| CRN 185-4 | 90 | DN 200 |
| CRN 185-5-3 | 110 | DN 200 |
| CRN 185-5 | 110 | DN 200 |
| CRN 185-6-3 | 132 | DN 200 |
| CRN 185-6 | 132 | DN 200 |
| CRN 185-7-3 | 160 | DN 200 |
| CRN 185-7 | 160 | DN 200 |
| CRN 185-8-3 | 200 | DN 200 |
| CRN 185-8 | 200 | DN 200 |

| 380-415V | 380-415V 3ph 50Hz | | | | | |
|----------|-------------------|--|--|--|--|--|
| £ | Product Code | | | | | |
| AFHE | HQQE | | | | | |
| 16,962 | 99143735 | | | | | |
| 18,618 | 99143736 | | | | | |
| POA | 99143737 | | | | | |
| POA | 99143738 | | | | | |
| POA | 99143739 | | | | | |
| POA | 99143740 | | | | | |
| POA | 99143741 | | | | | |
| POA | 99143742 | | | | | |
| POA | 99143743 | | | | | |
| POA | 99143744 | | | | | |
| POA | 99143745 | | | | | |
| POA | 99143746 | | | | | |
| POA | 99143747 | | | | | |
| POA | 99143748 | | | | | |
| POA | 99921028 | | | | | |
| POA | 99143750 | | | | | |

ELECTRIC MOTOR

380-415V 3ph 50Hz

IP55 Class F insulation

All 3 Phase motors 0.75kW and above are IE3 Efficiency.

Please see page 60 for motor retrofit details.

Custom Built pump options; different flanges, seals and elastomers can be configured and priced on request by your Sales Office.

PIPE CONNECTIONS

Large CRN models are DIN flanged as standard and supplied without the counter flanges to EN 1092-2 1997 [BS4504] Pump housing flanged to the following as standard - check PN pressure rating.

CRN 32: DN65 --- PN16/PN25/PN40 dependant on model.

CRN 45: DN80 --- PN16/PN25/PN40 dependant on model.

CRN 64: DN100 --- PN16/PN25/PN40 dependant on model.

CRN95: DN100 --- PN16, PN25/40 dependant on model.

CRN125, CRN155: DN150 --- PN16, PN25/40 dependant on model. Please see page 46/47 for pipe connection accessories and list prices.

CATEGORY 2 - CRIE1 to CRIE20

CRIE 304 STAINLESS STEEL VARIABLE SPEED PUMPS WITHOUT SENSOR

| 0.1.12 30 1 3171 | | ************************************** | D POINTS WITH | 200-240V 1p | h 50/60Hz | 380-480/500V | 2nh 50/60Hz |
|------------------|----------|--|---------------|-------------|--------------|--------------|----------------------|
| | P2 | Pipe | Transducer | £ | Product Code | £ | Product Code |
| Model | kW | connection | Range | A CA A E | | A CA A E | |
| CRIE 1-4 | 0.37 | 32mm | 0 - 6 bar | 1,740 | 98389343 | 1,954 | 98389360 |
| CRIE 1-6 | 0.55 | 32mm | 0 - 10 bar | 1,896 | 98389344 | 2,111 | 98389361 |
| CRIE 1-9 | 0.75 | 32mm | 0 - 10 bar | 2,109 | 98389345 | 2,351 | 98389362 |
| CRIE 1-13 | 1.1 | 32mm | 0 - 16 bar | 2,505 | 98389346 | 2,774 | 98389363 |
| CRIE 1-17 | 1.5 | 32mm | 0 - 16 bar | 3,143 | 98389347 | 3,358 | 98389364 |
| CRIE 1-25 | 2.2 | 32mm | 0 - 25 bar | 3,143 | 30303347 | 4,057 | 98389365 |
| CRIE 1-25 | 2.2 | 3211111 | 0 - 25 Dai | | | A FGJ A E | |
| CRIE 1-27 | 3 | DN 25/32 | 0 - 25 bar | - | | 4,866 | 99072120 |
| CRIE 1-27 | <u> </u> | DIN 23/32 | 0 - 25 Dai | A CA A E | HOOF | A CA A E | |
| CRIE 3-2 | 0.37 | 22mm | 0 - 4 bar | 1,666 | 98389726 | 1,880 | 98389751 |
| | | 32mm | 0 - 4 bar | 1,800 | | 2,016 | |
| CRIE 3-4 | 0.55 | 32mm | | | 98389727 | | 98389752 98389753 |
| CRIE 3-5 | 0.75 | 32mm | 0 - 6 bar | 1,984 | 98389728 | 2,226 | |
| CRIE 3-8 | 1.1 | 32mm | 0 - 10 bar | 2,267 | 98389729 | 2,538 | 98389754 |
| CRIE 3-11 | 1.5 | 32mm | 0 - 16 bar | 2,766 | 98389730 | 2,981 | 98389756 |
| CRIE 3-17 | 2.2 | 32mm | 0 - 25 bar | | | 3,705 | 98389757 |
| | | | | | | A FGJ A E | |
| CRIE 3-23 | 3 | DN 25/32 | 0 - 25 bar | - | - | 4,340 | 99072151 |
| CRIE 3-25 | 4 | DN 25/32 | 0 - 25 bar | - | - | 5,195 | 99072152 |
| | | | | A CA A E | | A CA A E | |
| CRIE 5-2 | 0.55 | 32mm | 0 - 4 bar | 1,774 | 98390047 | 1,989 | 98390067 |
| CRIE 5-4 | 1.1 | 32mm | 0 - 6 bar | 2,074 | 98390048 | 2,342 | 98390068 |
| CRIE 5-5 | 1.5 | 32mm | 0 - 6 bar | 2,529 | 98390049 | 2,745 | 98390069 |
| CRIE 5-9 | 2.2 | 32mm | 0 - 10 bar | - | - | 3,414 | 98390070 |
| | | | | | | A FGJ A E | |
| CRIE 5-12 | 3 | DN 25/32 | 0 - 16 bar | - | - | 4,005 | 99072212 |
| CRIE 5-16 | 4 | DN 25/32 | 0 - 25 bar | | | 4,771 | 99072213 |
| CRIE 5-22 | 5.5 | DN 25/32 | 0 - 25 bar | - | - | 5,772 | 99072214 |
| CRIE 5-24 | 7.5 | DN 25/32 | 0 - 25 bar | | | 6,839 | 99075981 |
| | | | | A CA A E | HQQE | A CA A E | HQQE |
| CRIE 10-1 | 0.75 | 50mm | 0 - 4 bar | 2,068 | 98390278 | 2,310 | 98390690 |
| CRIE 10-2 | 1.5 | 50mm | 0 - 4 bar | 2,706 | 98390279 | 2,922 | 98390284 |
| CRIE 10-3 | 2.2 | 50mm | 0 - 6 bar | | - | 3,558 | 98390285 |
| CRIE 10-5 | 3 | 50mm | 0 - 10 bar | | - | 4,081 | 99071462 |
| CRIE 10-6 | 4 | 50mm | 0 - 10 bar | - | - | 4,962 | 99071463 |
| CRIE 10-9 | 5.5 | 50mm | 0 - 16 bar | - | - | 6,082 | 99071792 |
| | | | | A FGJ A E | HQQE | A FGJ A E | HQQE |
| CRIE 10-5 | 3 | DN 40 | 0 - 10 bar | - | - | 4,187 | 99071467 |
| CRIE 10-6 | 4 | DN 40 | 0 - 10 bar | - | - | 5,068 | 99071469 |
| CRIE 10-9 | 5.5 | DN 40 | 0 - 16 bar | - | - | 6,188 | 99071799 |
| CRIE 10-12 | 7.5 | DN 40 | 0 - 25 bar | - | - | 7,590 | 99071800 |
| CRIE 10-17 | 11 | DN 40 | 0 - 25 bar | - | - | 9,809 | 99071801 |
| | | | | | | · | |
| CRIE 15-1 | 1.5 | DN 50 | 0 - 4 bar | 2,780 | 98390724 | 2,993 | 98390727 |
| CRIE 15-2 | 3 | DN 50 | 0 - 10 bar | - | - | 4,126 | 99071546 |
| CRIE 15-3 | 4 | DN 50 | 0 - 10 bar | - | - | 4,985 | 99071547 |
| CRIE 15-4 | 5.5 | DN 50 | 0 - 10 bar | - | - | 5,995 | 99071548 |
| CRIE 15-5 | 7.5 | DN 50 | 0 - 16 bar | | | 7,123 | 99071549 |
| CRIE 15-8 | 11 | DN 50 | 0 - 25 bar | - | _ | 9,220 | 99071551 |
| CRIE 15-10 | 15 | DN 50 | 0 - 25 bar | | - | 11,334 | 96514522 |
| CRIE 15-12 | 18.5 | DN 50 | 0 - 25 bar | - | | 13,695 | 96514523 |
| CKIL 13-12 | 16.5 | DN 30 | 0 - 23 bai | | | 13,033 | 30314323 |
| CRIE 20-1 | 2.2 | DN EU | 0 - 4 bar | - | | 3,654 | 98390783 |
| CRIE 20-1 | | DN 50 | 0 - 4 bar | | | | |
| CRIE 20-2 | 4 | DN 50 | 0 - 6 bar | - | - | 5,042 | 99071681 |
| CRIE 20-3 | 5.5 | DN 50 | 0 - 10 bar | - | - | 6,064 | 99071682 |
| CRIE 20-4 | 7.5 | DN 50 | 0 - 10 bar | - | - | 7,207 | 99071683 |
| CRIE 20-6 | 11 | DN 50 | 0 - 16 bar | - | - | 9,327 | 99071684 |
| CRIE 20-8 | 15 | DN 50 | 0 - 25 bar | - | = | 11,473 | 96514656 |
| CRIE 20-10 | 18.5 | DN 50 | 0 - 25 bar | - | - | 13,861 | 96514657 |

CRIE OPERATION

These pump models have been designed for operation in either open or closed loop control arrangements. The default control mode is "Constant Curve/Uncontrolled". For closed loop control either differential pressure transducers, pressure transducers or temperature transducers can be supplied as separate items; as required. Pressure transducers are listed with their ranges in the following tables as the recommended option.

A pressure vessel must be fitted on the discharge pipe close to the pressure sensor and a non-return valve should be fitted to the pump suction, on all CRIE pumps where the "stop" function is activated.

Pumps with Custom Built options such as special seals and non standard configurations can be configured and priced on request by your Sales Office.

REMEMBER: PUMPS with CA Bases normally need 2x 2 Bolt Oval Flanges - see page 47

CRIE Flanged models (FGJ) are DIN flanged as standard and are supplied without the counter flanges to EN 1092-2 1997 [was BS4504: 1989] Please see page 46/47 for pipe connection accessories and list prices.

ELECTRIC MOTOR

IMPORTANT For all E pumps the 60Hz pump performance is the same on both 50 or 60 Hz power supply A Grundfos GO based communication device will be required in order to commission the "E" product. 200-240V 1ph 50/60Hz

See page 22 for details.

This device can be used to commission and monitor multiple pumps on multiple sites.

IE5 380-500V 3ph 50/60Hz up to 11kW 380-480V 3ph 50/60Hz above 15kW IP55 Class F insulation

CATEGORY 2 - CRIE1 to CRIE20

CRIE 304 STAINLESS STEEL VARIABLE SPEED PUMPS WITH SENSOR FITTED

| | | | | 200-240V 1 | ph 50/60Hz | 380-480/500V | 3ph 50/60Hz |
|------------|--------|------------|------------|------------|--------------|-------------------|--------------|
| | P2 | Pipe | Transducer | £ | Product Code | £ | Product Code |
| Model | kW | connection | Range | N CA A | E HQQE | N CA A E | |
| CRIE 1-4 | 0.37 | 32mm | 0 - 6 bar | 1,979 | 98389381 | 2,193 | 98389400 |
| CRIE 1-6 | 0.55 | 32mm | 0 - 10 bar | 2,135 | 98389382 | 2,351 | 98389401 |
| CRIE 1-9 | 0.75 | 32mm | 0 - 10 bar | 2,348 | 98389383 | 2,590 | 98389403 |
| CRIE 1-13 | 1.1 | 32mm | 0 - 16 bar | 2,745 | 98389384 | 3,013 | 98389404 |
| CRIE 1-17 | 1.5 | 32mm | 0 - 16 bar | 3,382 | 98389385 | 3,597 | 98389405 |
| CRIE 1-25 | 2.2 | 32mm | 0 - 25 bar | - | - | 4,298 | 98389406 |
| | | | - | - | - | N FGJ A | |
| CRIE 1-27 | 3 | DN 25/32 | 0 - 25 bar | - | - | 5,105 | 99072123 |
| | | * | - | N CA A | E HQQE | N CA A E | HQQE |
| CRIE 3-2 | 0.37 | 32mm | 0 - 4 bar | 1,904 | 98389783 | 2,119 | 98389798 |
| CRIE 3-4 | 0.55 | 32mm | 0 - 6 bar | 2,039 | 98389784 | 2,255 | 98389799 |
| CRIE 3-5 | 0.75 | 32mm | 0 - 6 bar | 2,223 | 98389785 | 2,465 | 98389800 |
| CRIE 3-8 | 1.1 | 32mm | 0 - 10 bar | 2,508 | 98389786 | 2,776 | 98389801 |
| CRIE 3-11 | 1.5 | 32mm | 0 - 16 bar | 3,004 | 98389787 | 3,221 | 98389802 |
| CRIE 3-17 | 2.2 | 32mm | 0 - 25 bar | - | - | 3,943 | 98389804 |
| | | | | - | | N FGJ A | |
| CRIE 3-23 | 3 | DN 25/32 | 0 - 25 bar | | - | 4,579 | 99072158 |
| CRIE 3-25 | 4 | DN 25/32 | 0 - 25 bar | | | 5,436 | 99072159 |
| CITIE 5 25 | - | 514 25/52 | 0 25 501 | N CA A | E HQQE | N CA A E | |
| CRIE 5-2 | 0.55 | 32mm | 0 - 4 bar | 2,013 | 98390079 | 2,229 | 98390089 |
| CRIE 5-4 | 1.1 | 32mm | 0 - 6 bar | 2,313 | 98390079 | 2,582 | 98390090 |
| CRIE 5-5 | 1.5 | 32mm | 0 - 6 bar | 2,768 | 98390082 | 2,983 | 98390091 |
| CRIE 5-9 | 2.2 | 32mm | 0 - 10 bar | 2,700 | - | 3,654 | |
| CRIE 5-9 | 2.2 | 3211111 | 0 - 10 bar | | | N FGJ A | 98390092 |
| CDIE E 12 | 2 | DN 25/32 | 0 16 har | | | | |
| CRIE 5-12 | 3 4 | | 0 - 16 bar | | <u> </u> | 4,244 | 99072221 |
| CRIE 5-16 | | DN 25/32 | 0 - 25 bar | | | 5,009 | 99072222 |
| CRIE 5-22 | 5.5 | DN 25/32 | 0 - 25 bar | | - | 6,012 | 99072223 |
| CRIE 5-24 | 7.5 | DN 25/32 | 0 - 25 bar | - N CA A | E HQQE | 7,078 N CA A E | 99075984 |
| CDIE 10.1 | 0.75 | F0 | 0.45 | | | | |
| CRIE 10-1 | 0.75 | 50mm | 0 - 4 bar | 2,301 | 98390290 | 2,542 | 98390694 |
| CRIE 10-2 | 1.5 | 50mm | 0 - 4 bar | 2,941 | 98390291 | 3,156 | 98390296 |
| CRIE 10-3 | 2.2 | 50mm | 0 - 6 bar | | - | 3,793 | 98390297 |
| CRIE 10-5 | 3 | 50mm | 0 - 10 bar | | - | 4,315 | 99071470 |
| CRIE 10-6 | 4 | 50mm | 0 - 10 bar | - | - | 5,196 | 99071471 |
| CRIE 10-9 | 5.5 | 50mm | 0 - 16 bar | - NECLA | - | 6,316 | 99071802 |
| | | | 0.101 | N FGJ A | E HQQE | N FGJ A | |
| CRIE 10-5 | 3 | DN 40 | 0 - 10 bar | | <u> </u> | 4,421 | 99071475 |
| CRIE 10-6 | 4 | DN 40 | 0 - 10 bar | - | - | 5,302 | 99071476 |
| CRIE 10-9 | 5.5 | DN 40 | 0 - 16 bar | - | <u>-</u> | 6,423 | 99071808 |
| CRIE 10-12 | 7.5 | DN 40 | 0 - 25 bar | | - | 7,824 | 99071809 |
| CRIE 10-17 | 11 | DN 40 | 0 - 25 bar | | - | 10,041 | 99071810 |
| | | | | | | | |
| CRIE 15-1 | 1.5 | DN 50 | 0 - 4 bar | 3,011 | 98390731 | 3,223 | 98390734 |
| CRIE 15-2 | 3 | DN 50 | 0 - 10 bar | | - | 4,356 | 99071565 |
| CRIE 15-3 | 4 | DN 50 | 0 - 10 bar | | - | 5,216 | 99071566 |
| CRIE 15-4 | 5.5 | DN 50 | 0 - 10 bar | - | - | 6,226 | 99071568 |
| CRIE 15-5 | 7.5 | DN 50 | 0 - 16 bar | | - | 7,353 | 99071569 |
| CRIE 15-8 | 11 | DN 50 | 0 - 25 bar | - | <u>-</u> | 9,451 | 99071570 |
| CRIE 15-10 | 15 | DN 50 | 0 - 25 bar | - | <u>-</u> | 11,565 | 96514591 |
| CRIE 15-12 | 18.5 | DN 50 | 0 - 25 bar | - | <u>-</u> | 13,925 | 96514592 |
| | | | | | | | |
| CRIE 20-1 | 2.2 | DN 50 | 0 - 4 bar | | - | 3,884 | 98390786 |
| CRIE 20-2 | 4 | DN 50 | 0 - 6 bar | <u> </u> | - | 5,274 | 99071694 |
| CRIE 20-3 | 5.5 | DN 50 | 0 - 10 bar | - | - | 6,294 | 99071695 |
| CRIE 20-4 | 7.5 | DN 50 | 0 - 10 bar | - | - | 7,437 | 99071696 |
| CRIE 20-6 | 11 | DN 50 | 0 - 16 bar | - | - | 9,559 | 99071698 |
| CRIE 20-8 | 15 | DN 50 | 0 - 25 bar | - | - | 11,704 | 96514717 |
| CRIE 20-10 | 18.5 | DN 50 | 0 - 25 bar | - | - | 14,093 | 96514718 |
| | | | | - | • | | |

CRIE OPERATION

These models have been designed for closed feedback loop variable speed control and are supplied with constant pressure transducers already fitted. The default control mode is "constant pressure".

A pressure vessel must be fitted on the discharge pipe close to the pressure sensor and a non-return valve should be fitted to the pump suction, on all CRIE pumps where the "stop" function is activated.

REMEMBER: PUMPS with CA Bases normally need 2x 2 Bolt Oval Flanges - see page 47

CRIE Flanged models (FGJ) are DIN flanged as standard and are supplied without the counter flanges to EN 1092-2 1997 [was BS4504: 1989] Please see page 46/47 for pipe connection accessories and list prices.

ELECTRIC MOTOR

IP55 Class F insulation

IMPORTANT

For all E pumps the 60Hz pump performance is the same on both 50 or 60 Hz power supply A Grundfos GO based communication device will be required in order to commission the "E" product. 200-240V 1ph 50/60Hz

See Page 22 for details.

IE5 380-500V 3ph 50/60Hz up to 11kW 380-480V 3ph 50/60Hz above 15kW

CATEGORY 2 - CRE32 to CRE150

CRE CAST IRON AND 304 STAINLESS STEEL VARIABLE SPEED PUMPS - WITHOUT AND WITH SENSOR

| | | | | 200-240V 1ph 50/60Hz | 380-480/500V | 3ph 50/60Hz |
|-------------|------|------------|------------|----------------------|--------------|--------------|
| | | | | £ Product Code | £ | Product Code |
| | P2 | Pipe | Transducer | WITHOUT SENSOR | with s | ENSOR |
| Model | kW | connection | Range | A F A E HQQE | N F A E | HQQE |
| CRE 32-1-1 | 2.2 | DN 65 | 0 - 4 bar | 4,033 98390932 | 4,273 | 98390933 |
| CRE 32-1 | 3 | DN 65 | 0 - 4 bar | 4,545 99071938 | 4,786 | 99071957 |
| CRE 32-2-1 | 5.5 | DN 65 | 0 - 10 bar | 6,709 99071942 | 6,948 | 99071958 |
| CRE 32-2 | 7.5 | DN 65 | 0 - 10 bar | 8,192 99071953 | 8,433 | 99071959 |
| CRE 32-4-2 | 11 | DN 65 | 0 - 16 bar | 10,896 99071955 | 11,137 | 99071960 |
| CRE 32-5-2 | 15 | DN 65 | 0 - 16 bar | 13,151 96122663 | 13,389 | 96122671 |
| CRE 32-6 | 18.5 | DN 65 | 0 - 25 bar | 15,580 96122664 | 15,820 | 96122672 |
| CRE 32-7 | 22 | DN 65 | 0 - 25 bar | 17,890 96122665 | 18,129 | 96122673 |
| | | | | | | |
| CRE 45-1-1 | 5.5 | DN 80 | 0 - 6 bar | 6,565 99072009 | 6,804 | 99072016 |
| CRE 45-1 | 7.5 | DN 80 | 0 - 6 bar | 8,030 99072011 | 8,271 | 99072017 |
| CRE 45-2-1 | 11 | DN 80 | 0 - 10 bar | 10,577 99072014 | 10,817 | 99072019 |
| CRE 45-2 | 15 | DN 80 | 0 - 10 bar | 12,847 96123405 | 13,086 | 96123413 |
| CRE 45-3 | 18.5 | DN 80 | 0 - 16 bar | 15,333 96123406 | 15,572 | 96123414 |
| CRE 45-4-2 | 22 | DN 80 | 0 - 16 bar | 17,368 96123407 | 17,607 | 96123415 |
| | | | | | | |
| CRE 64-1-1 | 7.5 | DN 100 | 0 - 6 bar | 7,726 99072057 | 7,962 | 99072061 |
| CRE 64-1 | 11 | DN 100 | 0 - 6 bar | 10,527 99072059 | 10,763 | 99072062 |
| CRE 64-2-2 | 15 | DN 100 | 0 - 10 bar | 12,321 96123994 | 12,558 | 96123999 |
| CRE 64-2-1 | 18.5 | DN 100 | 0 - 10 bar | 14,821 96123995 | 15,057 | 96124000 |
| CRE 64-3-2 | 22 | DN 100 | 0 - 16 bar | 16,543 96123996 | 16,779 | 96124001 |
| | | | | | | |
| CRE 95-1-1 | 11 | DN 100 | 0 - 6 bar | 9,804 99264346 | 10,038 | 99264415 |
| CRE 95-1 | 15 | DN 100 | 0 - 6 bar | 12,034 99264358 | 12,268 | 99264416 |
| CRE 95-2-2 | 18.5 | DN 100 | 0 - 10 bar | 14,306 99264359 | 14,538 | 99264417 |
| CRE 95-2-1 | 22 | DN 100 | 0 - 10 bar | 16,105 99264360 | 16,338 | 99264418 |
| | | | | | | |
| CRE 125-1-1 | 15 | DN 150 | 0 - 6 bar | 12,035 99264393 | 12,270 | 99264451 |
| CRE 125-1 | 18.5 | DN 150 | 0 - 6 bar | 15,569 99264394 | 15,805 | 99264452 |
| | | | | | | |
| CRE 155-1-1 | 18.5 | DN 150 | 0 - 6 bar | 14,907 99264409 | 15,143 | 99264463 |
| | | • | • | · | | <u> </u> |

Pumps without sensor are designed for operation in either open or closed loop control arrangements and the default control mode is "Constant Curve/Uncontrolled". For closed loop control either differential pressure transducers, pressure transducers or temperature transducers can be supplied as separate items; as required. Pressure transducers are listed with their ranges in the following tables as the recommended option.

Pumps with sensor are designed for closed loop variable speed control and are supplied with factory fitted pressure transducers. The default control mode is "constant pre

A pressure vessel must be fitted on the discharge pipe close to the pressure sensor and a non-return valve should be fitted to the pump suction, on all CRE pumps where the "stop" function is activated.

All of the above CRE pumps are supplied with flanged pump bases requiring round DIN counter flanges as the pipework connection. Please see page 46/47 for pipe connection accessories and list prices.

A Grundfos GO based communication device will be required in order to commission the "E" product. See page 22 for details. This device can be used to commission and monitor multiple pumps on multiple sites.

ELECTRIC MOTOR

For all E pumps the 60Hz pump performance is the same on both 50 or 60 Hz power supply 380-500V 3ph 50/60Hz up to 11kW with IE5 efficiency 380-480V 3ph 50/60Hz above 15kW IP55 Class F insulation

Pumps with Custom Built options such as special seals and non standard configurations can be configured and priced on request by your Sales Office.





CATEGORY 2 - CRNE1 to CRNE20

CRNE 316 STAINLESS STEEL VARIABLE SPEED PUMPS WITHOUT SENSOR

| | | | | 200-240V 1p | h 50/60Hz | 380-480/500V | 3ph 50/60Hz |
|------------|------|------------|------------|-------------|--------------|--------------|--------------|
| | P2 | Pipe | Transducer | £ | Product Code | £ | Product Code |
| Model | kW | connection | Range | A FGJ A I | HQQE | A FGJ A | E HQQE |
| CRNE 1-4 | 0.37 | DN 25/32 | 0 - 6 bar | 1,997 | 98389459 | 2,212 | 98389501 |
| CRNE 1-6 | 0.55 | DN 25/32 | 0 - 10 bar | 2,164 | 98389460 | 2,379 | 98389503 |
| CRNE 1-9 | 0.75 | DN 25/32 | 0 - 10 bar | 2,397 | 98389462 | 2,638 | 98389504 |
| CRNE 1-13 | 1.1 | DN 25/32 | 0 - 16 bar | 2,834 | 98389463 | 3,102 | 98389505 |
| CRNE 1-17 | 1.5 | DN 25/32 | 0 - 16 bar | 3,509 | 98389464 | 3,724 | 98389506 |
| CRNE 1-25 | 2.2 | DN 25/32 | 0 - 25 bar | - | - | 4,463 | 98389507 |
| CRNE 1-27 | 3 | DN 25/32 | 0 - 25 bar | - | - | 5,258 | 99072128 |
| | | | | | | | |
| CRNE 3-2 | 0.37 | DN 25/32 | 0 - 4 bar | 1,929 | 98389844 | 2,144 | 98389889 |
| CRNE 3-4 | 0.55 | DN 25/32 | 0 - 6 bar | 2,070 | 98389845 | 2,286 | 98389890 |
| CRNE 3-5 | 0.75 | DN 25/32 | 0 - 6 bar | 2,272 | 98389846 | 2,515 | 98389891 |
| CRNE 3-8 | 1.1 | DN 25/32 | 0 - 10 bar | 2,584 | 98389847 | 2,853 | 98389892 |
| CRNE 3-11 | 1.5 | DN 25/32 | 0 - 16 bar | 3,109 | 98389848 | 3,325 | 98389893 |
| CRNE 3-17 | 2.2 | DN 25/32 | 0 - 25 bar | | _ | 4,103 | 98389894 |
| CRNE 3-23 | 3 | DN 25/32 | 0 - 25 bar | - | - | 4,713 | 99072168 |
| CRNE 3-25 | 4 | DN 25/32 | 0 - 25 bar | | - | 5,616 | 99072169 |
| | | | | | | | |
| CRNE 5-2 | 0.55 | DN 25/32 | 0 - 4 bar | 2,033 | 98390117 | 2,248 | 98390150 |
| CRNE 5-4 | 1.1 | DN 25/32 | 0 - 6 bar | 2,359 | 98390118 | 2,628 | 98390151 |
| CRNE 5-5 | 1.5 | DN 25/32 | 0 - 6 bar | 2,840 | 98390120 | 3,054 | 98390152 |
| CRNE 5-9 | 2.2 | DN 25/32 | 0 - 10 bar | - | | 3,765 | 98390153 |
| CRNE 5-12 | 3 | DN 25/32 | 0 - 16 bar | - | | 4,321 | 99072237 |
| CRNE 5-16 | 4 | DN 25/32 | 0 - 25 bar | | - | 5,127 | 99072238 |
| CRNE 5-22 | 5.5 | DN 25/32 | 0 - 25 bar | | - | 6,202 | 99072239 |
| CRNE 5-24 | 7.5 | DN 25/32 | 0 - 25 bar | - | - | 7,327 | 99075989 |
| | | | | _ | | | |
| CRNE 10-1 | 0.75 | DN 40 | 0 - 4 bar | 2,336 | 98390311 | 2,578 | 98390701 |
| CRNE 10-2 | 1.5 | DN 40 | 0 - 4 bar | 3,000 | 98390312 | 3,216 | 98390323 |
| CRNE 10-3 | 2.2 | DN 40 | 0 - 6 bar | - | <u>-</u> | 3,865 | 98390324 |
| CRNE 10-5 | 3 | DN 40 | 0 - 10 bar | = | <u>-</u> | 4,421 | 99071488 |
| CRNE 10-6 | 4 | DN 40 | 0 - 10 bar | - | - | 5,348 | 99071490 |
| CRNE 10-9 | 5.5 | DN 40 | 0 - 16 bar | = | - | 6,541 | 99071826 |
| CRNE 10-12 | 7.5 | DN 40 | 0 - 25 bar | - | <u>-</u> | 8,038 | 99071827 |
| CRNE 10-17 | 11 | DN 40 | 0 - 25 bar | - | - | 10,392 | 99071829 |
| | | | | | | | |
| CRNE 15-1 | 1.5 | DN 50 | 0 - 4 bar | 2,995 | 98390739 | 3,207 | 98390746 |
| CRNE 15-2 | 3 | DN 50 | 0 - 10 bar | - | - | 4,363 | 99071604 |
| CRNE 15-3 | 4 | DN 50 | 0 - 10 bar | <u> </u> | - | 5,274 | 99071605 |
| CRNE 15-4 | 5.5 | DN 50 | 0 - 10 bar | | - | 6,349 | 99071606 |
| CRNE 15-5 | 7.5 | DN 50 | 0 - 16 bar | - | <u> </u> | 7,545 | 99071607 |
| CRNE 15-8 | 11 | DN 50 | 0 - 25 bar | | - | 9,774 | 99071608 |
| CRNE 15-10 | 15 | DN 50 | 0 - 25 bar | | <u>-</u> | 12,040 | 96514538 |
| CRNE 15-12 | 18.5 | DN 50 | 0 - 25 bar | - | - | 14,549 | 96514539 |
| | | | | - | | | |
| CRNE 20-1 | 2.2 | DN 50 | 0 - 4 bar | | <u>-</u> | 3,854 | 98390792 |
| CRNE 20-2 | 4 | DN 50 | 0 - 6 bar | - | - | 5,326 | 99071718 |
| CRNE 20-3 | 5.5 | DN 50 | 0 - 10 bar | - | - | 6,413 | 99071719 |
| CRNE 20-4 | 7.5 | DN 50 | 0 - 10 bar | | - | 7,621 | 99071720 |
| CRNE 20-6 | 11 | DN 50 | 0 - 16 bar | - | - | 9,872 | 99071722 |
| CRNE 20-8 | 15 | DN 50 | 0 - 25 bar | | <u>-</u> | 12,170 | 96514671 |
| CRNE 20-10 | 18.5 | DN 50 | 0 - 25 bar | - | - | 14,706 | 96514672 |

CRNE OPERATION

These pump models have been designed for operation in either open or closed loop control arrangements. The default control mode is "Constant Curve/Uncontrolled". For closed loop control either differential pressure transducers, pressure transducers or temperature transducers can be supplied as separate items; as required. Pressure transducers are listed with their ranges in the following tables as the recommended option.

A pressure vessel must be fitted on the discharge pipe close to the pressure sensor and a non-return valve should be fitted to the pump suction, on all CRNE pumps where the "stop" function is activated.

Pumps with Custom Built options such as special seals and non standard configurations can be configured and priced on request by your Sales Office.

The above CRNE flanged models (FGJ) are DIN flanged as standard and are supplied without the counter flanges to EN 1092-2 1997 [was BS4504:1989]

ELECTRIC MOTOR

For all E pumps the 60Hz pump performance is the same on both 50 or 60 Hz power supply 200-240V 1ph 50/60Hz
IE5 380-500V 3ph 50/60Hz up to 11kW
380-480V 3ph 50/60Hz above 15kW
IP55 Class F insulation

Pumps with Custom Built options such as special seals and non standard configurations can be configured and priced on request by your Sales Office.

IMPORTANT

A Grundfos GO based communication device will be required in order to commission the "E" product. See page 22 for details. This device can be used to commission and monitor multiple pumps on multiple sites.



CATEGORY 2 - CRNE1 to CRNE20

CRNE 316 STAINLESS STEEL VARIABLE SPEED PUMPS WITH SENSOR

| Model KW Connection Range E Product Code N FGIA E HOQE S839958 2,450 9839958 2,616 9839589 2,616 9839589 2,616 9839589 2,616 9839589 2,616 9839589 2,616 9839589 2,616 983958 2 | | P2 | Pipe | Transducer | 200-240V | 1ph 50/60Hz | 380-480/500V | 3ph 50/60Hz |
|--|------------|------|------------|------------|----------|--------------|--------------|--------------|
| CRNE 1-4 | Model | kW | connection | Range | £ | Product Code | £ | Product Code |
| CRNE 1-6 | | | | | N FGJ / | A E HQQE | N FGJ A | E HQQE |
| CRNE 1-9 | CRNE 1-4 | 0.37 | DN 25/32 | 0 - 6 bar | 2,236 | 98389538 | 2,450 | 98389584 |
| CRNE 1-13 | CRNE 1-6 | 0.55 | DN 25/32 | 0 - 10 bar | 2,402 | 98389539 | 2,616 | 98389586 |
| CRNE 1-17 | CRNE 1-9 | 0.75 | DN 25/32 | 0 - 10 bar | 2,635 | 98389542 | 2,876 | 98389587 |
| CRNE 1-25 2.2 DN 25/32 0 - 25 bar | CRNE 1-13 | 1.1 | DN 25/32 | 0 - 16 bar | 3,072 | 98389545 | 3,340 | 98389588 |
| CRNE 1-27 3 DN 25/32 0 - 25 bar . 5,495 99072135 CRNE 3-2 0.37 DN 25/32 0 - 4 bar 2,168 98389924 2,385 98389927 CRN 3-4 0.55 DN 25/32 0 - 6 bar 2,311 98889925 2,756 98389997 CRN 3-8 1.1 DN 25/32 0 - 16 bar 3,484 9838997 3,094 9838997 CRN 3-11 1.5 DN 25/32 0 - 16 bar 3,484 9838997 3,094 9838997 CRN 3-17 2.2 DN 25/32 0 - 25 bar - - 4,342 9838997 CRN 3-12 3 DN 25/32 0 - 25 bar - - 4,342 9838997 CRN 3-25 4 DN 25/32 0 - 25 bar - - 4,952 98389977 CRN 5-2 0.55 DN 25/32 0 - 5 bar - - - 4,952 9907228 CRN 5-2 0.55 DN 25/32 0 - 6 bar 2,598 9839017 | CRNE 1-17 | 1.5 | DN 25/32 | 0 - 16 bar | 3,747 | 98389546 | 3,962 | 98389589 |
| CRNE 3-2 0.37 DN 25/32 0 -4 bar 2.318 98389224 2.385 98389274 CRNE 3-4 0.55 DN 25/32 0 -6 bar 2.311 9888925 2.526 9838927 CRNE 3-5 0.75 DN 25/32 0 -10 bar 2.313 9888926 2.754 9838927 3.094 9838927 3.094 98389927 3.094 9838927 3.094 9838927 3.094 9838927 3.094 9838927 3.094 9838927 3.094 9838927 3.094 9838927 3.094 9838927 3.094 9838927 3.094 9838927 3.094 9838927 3.094 9838927 3.094 9838927 3.094 983927 | CRNE 1-25 | 2.2 | DN 25/32 | 0 - 25 bar | - | - | 4,701 | 98389591 |
| CRNE 3-4 | CRNE 1-27 | 3 | DN 25/32 | 0 - 25 bar | - | - | 5,495 | 99072135 |
| CRNE 3-4 | | | | | | | | |
| CRNE 3-5 | CRNE 3-2 | 0.37 | DN 25/32 | 0 - 4 bar | 2,168 | 98389924 | 2,385 | 98389972 |
| CRNE 5-8 | CRNE 3-4 | 0.55 | DN 25/32 | 0 - 6 bar | 2,311 | 98389925 | 2,526 | 98389973 |
| CRNE 5-11 1.5 | CRNE 3-5 | 0.75 | DN 25/32 | 0 - 6 bar | 2,513 | 98389926 | 2,754 | 98389974 |
| CRNE 3-17 2.2 DN 25/32 0 - 25 bar - - 4,342 93839977 CRNE 3-23 3 DN 25/32 0 - 25 bar - - - 5,856 99072181 CRNE 5-25 4 DN 25/32 0 - 6 bar - - - 5,866 99072181 CRNE 5-2 0.55 DN 25/32 0 - 6 bar 2,271 98390170 2,487 98390192 CRNE 5-4 1.1 DN 25/32 0 - 6 bar 3,079 98390172 3,293 98390193 CRNE 5-1 1.5 DN 25/32 0 - 10 bar - - 4,005 98390193 CRNE 5-16 4 DN 25/32 0 - 16 bar - - - 4,560 99072265 CRNE 5-16 4 DN 25/32 0 - 25 bar - - - 5,366 99072265 CRNE 5-16 4 DN 25/32 0 - 25 bar - - - - - 6,441 99072265 CRNE 5-12< | CRNE 3-8 | 1.1 | DN 25/32 | 0 - 10 bar | 2,824 | 98389927 | 3,094 | 98389975 |
| CRNE 3-23 3 | CRNE 3-11 | 1.5 | DN 25/32 | 0 - 16 bar | 3,348 | 98389930 | 3,565 | 98389976 |
| CRNE 3-25 4 DN 25/32 0 - 25 bar - - 5,856 99072181 CRNE 5-2 0.55 DN 25/32 0 - 4 bar 2,271 98390170 2,487 98390192 CRNE 5-4 1.1 DN 25/32 0 - 6 bar 2,598 98390171 2,867 98390193 CRNE 5-9 2.2 DN 25/32 0 - 10 bar - - 4,005 98390172 CRNE 5-12 3 DN 25/32 0 - 16 bar - - - 4,005 98390172 CRNE 5-16 4 DN 25/32 0 - 16 bar - - - 5,366 99072265 CRNE 5-12 3 DN 25/32 0 - 25 bar - - 5,366 99072265 CRNE 5-22 5.5 DN 25/32 0 - 25 bar - - 6,411 99072267 CRNE 5-24 7.5 DN 26/32 0 - 25 bar - - - 6,411 9907250 CRNE 5-2 5.5 DN 40 0 - 4 bar | CRNE 3-17 | 2.2 | DN 25/32 | 0 - 25 bar | - | - | 4,342 | 98389977 |
| CRNE 5-2 0.55 DN 25/32 0 - 4 bar 2,271 98390170 2,487 98390192 CRNE 5-4 1.1 DN 25/32 0 - 6 bar 2,598 98390171 2,867 98390193 CRNE 5-5 1.5 DN 25/32 0 - 6 bar 3,079 98390172 3,293 98390194 CRNE 5-9 2.2 DN 25/32 0 - 16 bar 5 - 4,005 98390172 CRNE 5-12 3 DN 25/32 0 - 16 bar 5 - 4,560 99072265 CRNE 5-16 4 DN 25/32 0 - 25 bar 5 - 5,366 99072266 CRNE 5-16 4 DN 25/32 0 - 25 bar 5 - 5,366 99072266 CRNE 5-16 4 DN 25/32 0 - 25 bar 5 - 5,366 99072266 CRNE 5-24 7.5 DN 25/32 0 - 25 bar 5 - 5,366 99072266 CRNE 5-24 7.5 DN 25/32 0 - 25 bar 5 - 5,366 99072266 CRNE 5-24 7.5 DN 25/32 0 - 25 bar 5 - 5,366 99072266 CRNE 5-24 7.5 DN 25/32 0 - 25 bar 5 - 5,366 99072266 CRNE 5-24 7.5 DN 25/32 0 - 25 bar 5 - 5,366 99072266 CRNE 10-1 0.75 DN 40 0 - 4 bar 3,234 98390335 2,810 98390759 CRNE 10-1 0.75 DN 40 0 - 4 bar 3,234 98390336 3,449 98390347 CRNE 10-2 1.5 DN 40 0 - 6 bar 5 - 4,4653 99071504 CRNE 10-3 2.2 DN 40 0 - 6 bar 5 - 4,4653 99071504 CRNE 10-6 4 DN 40 0 - 10 bar 5 - 4,4653 99071504 CRNE 10-6 4 DN 40 0 - 10 bar 5 - 5,580 99071504 CRNE 10-12 7.5 DN 40 0 - 25 bar 5 - 5 - 6,775 99071851 CRNE 10-12 7.5 DN 40 0 - 25 bar 5 - 5 - 6,775 99071851 CRNE 10-17 11 DN 40 0 - 25 bar 5 - 5 - 8,272 99071851 CRNE 10-17 11 DN 40 0 - 25 bar 5 - 5 - 6,580 99071505 CRNE 15-1 1.5 DN 50 0 - 10 bar 5 - 5 - 5,580 99071637 CRNE 15-1 1.5 DN 50 0 - 10 bar 5 - 5 - 6,580 99071637 CRNE 15-1 1.5 DN 50 0 - 10 bar 5 - 5 - 6,580 99071637 CRNE 15-1 1.5 DN 50 0 - 10 bar 5 - 5 - 5,590 99071637 CRNE 15-5 T,5 DN 50 0 - 10 bar 5 - 5 - 5,590 99071637 CRNE 15-5 T,5 DN 50 0 - 10 bar 5 - 5 - 5,590 99071637 CRNE 15-5 T,5 DN 50 0 - 10 bar 5 - 5 - 5,590 99071637 CRNE 15-10 15 DN 50 0 - 25 bar 5 - 5 - 10,005 99071647 CRNE 15-10 15 DN 50 0 - 25 bar 5 - 5 - 10,005 99071637 CRNE 15-10 15 DN 50 0 - 25 bar 5 - 5 - 10,005 99071637 CRNE 15-10 15 DN 50 0 - 25 bar 5 - 5 - 10,005 99071637 CRNE 15-10 15 DN 50 0 - 25 bar 5 - 5 - 10,005 99071637 CRNE 25-10 15 DN 50 0 - 25 bar 5 - 5 - 10,005 99071637 CRNE 25-10 15 DN 50 0 - 25 bar 5 - 5 - 10,005 99071637 CRNE 25-10 15 DN 50 0 - 25 bar 5 - 5 - | CRNE 3-23 | 3 | DN 25/32 | 0 - 25 bar | - | - | 4,952 | 99072180 |
| CRNE 5-4 1.1 DN 25/32 0 - 6 bar 2,598 98390171 2,667 98390192 CRNE 5-5 1.5 DN 25/32 0 - 6 bar 3,079 98390172 3,293 98390194 CRNE 5-9 2.2 DN 25/32 0 - 10 bar - - 4,005 98390195 CRNE 5-12 3 DN 25/32 0 - 25 bar - - - 5,366 99072265 CRNE 5-16 4 DN 25/32 0 - 25 bar - - 6,441 99072265 CRNE 5-24 7.5 DN 25/32 0 - 25 bar - - 6,441 99072265 CRNE 10-1 0.75 DN 40 0 - 4 bar 2,568 98390335 2,810 98390349 CRNE 10-2 1.5 DN 40 0 - 4 bar 3,234 98390336 3,449 98390348 CRNE 10-5 3 DN 40 0 - 10 bar - - 4,653 99071504 CRNE 10-6 4 DN 40 0 - 10 bar - | CRNE 3-25 | 4 | DN 25/32 | 0 - 25 bar | | - | 5,856 | 99072181 |
| CRNE 5-4 1.1 DN 25/32 0 - 6 bar 2,598 98390171 2,667 98390192 CRNE 5-5 1.5 DN 25/32 0 - 6 bar 3,079 98390172 3,293 98390194 CRNE 5-9 2.2 DN 25/32 0 - 10 bar - - 4,005 98390195 CRNE 5-12 3 DN 25/32 0 - 25 bar - - - 5,366 99072265 CRNE 5-16 4 DN 25/32 0 - 25 bar - - 6,441 99072265 CRNE 5-24 7.5 DN 25/32 0 - 25 bar - - 6,441 99072265 CRNE 10-1 0.75 DN 40 0 - 4 bar 2,568 98390335 2,810 98390349 CRNE 10-2 1.5 DN 40 0 - 4 bar 3,234 98390336 3,449 98390348 CRNE 10-5 3 DN 40 0 - 10 bar - - 4,653 99071504 CRNE 10-6 4 DN 40 0 - 10 bar - | - | | | | | | | |
| CRNE 5-5 1.5 DN 25/32 0 - 6 bar 3,079 98390172 3,293 98390194 CRNE 5-9 2.2 DN 25/32 0 - 10 bar - - 4,056 99072265 CRNE 5-16 4 DN 25/32 0 - 25 bar - - 4,560 99072265 CRNE 5-16 4 DN 25/32 0 - 25 bar - - 6,441 99072265 CRNE 5-22 5.5 DN 25/32 0 - 25 bar - - 6,441 99072265 CRNE 10-1 0.75 DN 40 0 - 4 bar 2,568 98390335 2,810 98390757 CRNE 10-1 0.75 DN 40 0 - 4 bar 3,234 98390335 3,449 9839034 CRNE 10-3 2.2 DN 40 0 - 10 bar - - 4,653 99071506 CRNE 10-5 3 DN 40 0 - 10 bar - - 4,653 99071506 CRNE 10-5 3 DN 40 0 - 10 bar - - 5,580 | CRNE 5-2 | 0.55 | DN 25/32 | 0 - 4 bar | 2,271 | 98390170 | 2,487 | 98390192 |
| CRNE 5-9 2.2 DN 25/32 0 - 10 bar - - 4,005 98390195 CRNE 5-12 3 DN 25/32 0 - 16 bar - - 4,560 99072265 CRNE 5-16 4 DN 25/32 0 - 25 bar - - 5,366 99072267 CRNE 5-22 5.5 DN 25/32 0 - 25 bar - - 6,441 9907267 CRNE 5-24 7.5 DN 25/32 0 - 25 bar - - 6,441 99072567 CRNE 10-1 0.75 DN 40 0 - 4 bar 2,568 98390335 2,810 98390347 CRNE 10-2 1.5 DN 40 0 - 4 bar 3,234 98390336 3,449 98390347 CRNE 10-3 3 DN 40 0 - 10 bar - - 4,653 99071506 CRNE 10-3 3 DN 40 0 - 10 bar - - - 4,653 99071506 CRNE 10-5 3 DN 40 0 - 10 bar - - < | CRNE 5-4 | 1.1 | DN 25/32 | 0 - 6 bar | 2,598 | 98390171 | 2,867 | 98390193 |
| CRNE 5-12 3 DN 25/32 0 - 16 bar - - 4,560 99072265 CRNE 5-16 4 DN 25/32 0 - 25 bar - - 5,366 99072265 CRNE 5-22 5.5 DN 25/32 0 - 25 bar - - 6,441 99072267 CRNE 5-24 7.5 DN 25/32 0 - 25 bar - - - 6,641 99072505 CRNE 10-1 0.75 DN 40 0 - 4 bar 2,568 98390335 2,810 98390707 CRNE 10-2 1.5 DN 40 0 - 4 bar 3,234 98390336 3,449 98390347 CRNE 10-3 2.2 DN 40 0 - 10 bar - - 4,663 99071506 CRNE 10-6 4 DN 40 0 - 10 bar - - - - 5,580 99071506 CRNE 10-9 5.5 DN 40 0 - 25 bar - - - 6,775 99071850 CRNE 10-12 7.5 DN 40 0 | CRNE 5-5 | 1.5 | DN 25/32 | 0 - 6 bar | 3,079 | 98390172 | 3,293 | 98390194 |
| CRNE 5-16 4 DN 25/32 0 - 25 bar - - 5,366 99072266 CRNE 5-22 5.5 DN 25/32 0 - 25 bar - - 6,441 99072267 CRNE 10-1 0.75 DN 40 0 - 4 bar 2,568 98390335 2,810 98390347 CRNE 10-1 0.75 DN 40 0 - 4 bar 3,234 93830336 3,449 98390347 CRNE 10-3 2.2 DN 40 0 - 6 bar - - 4,097 98390347 CRNE 10-5 3 DN 40 0 - 10 bar - - 4,653 99071504 CRNE 10-6 4 DN 40 0 - 10 bar - - - 4,653 99071506 CRNE 10-12 7.5 DN 40 0 - 25 bar - | CRNE 5-9 | 2.2 | DN 25/32 | 0 - 10 bar | | - | 4,005 | 98390195 |
| CRNE 5-22 5.5 DN 25/32 0 - 25 bar - - 6,441 99072267 CRNE 5-24 7.5 DN 25/32 0 - 25 bar - - - 6,441 99072569 CRNE 10-1 0.75 DN 40 0 - 4 bar 2,568 98390335 2,810 98390707 CRNE 10-2 1.5 DN 40 0 - 4 bar 3,234 98390336 3,449 98390348 CRNE 10-3 2.2 DN 40 0 - 6 bar - - - 4,653 99071504 CRNE 10-5 3 DN 40 0 - 10 bar - - - 4,653 99071504 CRNE 10-6 4 DN 40 0 - 10 bar - - - 5,580 99071506 CRNE 10-17 11 DN 40 0 - 25 bar - | CRNE 5-12 | 3 | DN 25/32 | 0 - 16 bar | | - | 4,560 | 99072265 |
| CRNE 10-1 0.75 DN 40 0 - 4 bar 2,568 98390335 2,810 98390707 CRNE 10-2 1.5 DN 40 0 - 4 bar 3,234 98390336 3,449 9839034 CRNE 10-3 2.2 DN 40 0 - 6 bar - - 4,097 98390348 CRNE 10-5 3 DN 40 0 - 10 bar - - 4,653 99071506 CRNE 10-6 4 DN 40 0 - 10 bar - - 6,775 99071850 CRNE 10-9 5.5 DN 40 0 - 25 bar - - 6,775 99071850 CRNE 10-12 7.5 DN 40 0 - 25 bar - - 8,272 99071851 CRNE 10-17 11 DN 40 0 - 25 bar - - 8,272 99071852 CRNE 15-1 1.5 DN 50 0 - 4 bar 3,225 98390752 3,437 98390758 CRNE 15-2 3 DN 50 0 - 10 bar - - - <t< td=""><td>CRNE 5-16</td><td>4</td><td>DN 25/32</td><td>0 - 25 bar</td><td></td><td>-</td><td>5,366</td><td>99072266</td></t<> | CRNE 5-16 | 4 | DN 25/32 | 0 - 25 bar | | - | 5,366 | 99072266 |
| CRNE 10-1 0.75 DN 40 0 - 4 bar 2,568 98390335 2,810 98390707 CRNE 10-2 1.5 DN 40 0 - 4 bar 3,234 9839036 3,449 98390347 CRNE 10-3 2.2 DN 40 0 - 6 bar 4,097 98390348 CRNE 10-5 3 DN 40 0 - 10 bar 4,653 99071504 CRNE 10-6 4 DN 40 0 - 10 bar 5,580 99071506 CRNE 10-9 5.5 DN 40 0 - 25 bar 8,272 99071851 CRNE 10-17 11 DN 40 0 - 25 bar 8,272 99071851 CRNE 10-17 1.5 DN 50 0 - 4 bar 3,225 98390752 CRNE 15-1 1.5 DN 50 0 - 10 bar 4,595 99071638 CRNE 15-3 4 DN 50 0 - 10 bar 4,595 99071638 CRNE 15-4 5.5 DN 50 0 - 10 bar | CRNE 5-22 | 5.5 | DN 25/32 | 0 - 25 bar | - | - | 6,441 | 99072267 |
| CRNE 10-2 1.5 DN 40 0 - 4 bar 3,234 98390336 3,449 98390347 CRNE 10-3 2.2 DN 40 0 - 6 bar - - 4,097 98390348 CRNE 10-5 3 DN 40 0 - 10 bar - - 4,653 99071506 CRNE 10-6 4 DN 40 0 - 10 bar - - 5,580 99071506 CRNE 10-9 5.5 DN 40 0 - 16 bar - - 6,775 99071850 CRNE 10-12 7.5 DN 40 0 - 25 bar - - 8,272 99071851 CRNE 10-17 11 DN 40 0 - 25 bar - - - 8,272 99071851 CRNE 15-1 1.5 DN 50 0 - 4 bar 3,225 98390752 3,437 98390758 CRNE 15-2 3 DN 50 0 - 10 bar - - 4,595 99071636 CRNE 15-3 4 DN 50 0 - 10 bar - - - | CRNE 5-24 | 7.5 | DN 25/32 | 0 - 25 bar | | - | 7,566 | 99075995 |
| CRNE 10-2 1.5 DN 40 0 - 4 bar 3,234 98390336 3,449 98390347 CRNE 10-3 2.2 DN 40 0 - 6 bar - - 4,097 98390348 CRNE 10-5 3 DN 40 0 - 10 bar - - 4,653 99071506 CRNE 10-6 4 DN 40 0 - 10 bar - - 5,580 99071506 CRNE 10-9 5.5 DN 40 0 - 16 bar - - 6,775 99071850 CRNE 10-12 7.5 DN 40 0 - 25 bar - - 8,272 99071851 CRNE 10-17 11 DN 40 0 - 25 bar - - - 8,272 99071851 CRNE 15-1 1.5 DN 50 0 - 4 bar 3,225 98390752 3,437 98390758 CRNE 15-2 3 DN 50 0 - 10 bar - - 4,595 99071636 CRNE 15-3 4 DN 50 0 - 10 bar - - - | | | | | | | | |
| CRNE 10-3 2.2 DN 40 0 - 6 bar - - 4,097 98390348 CRNE 10-5 3 DN 40 0 - 10 bar - - 4,653 99071504 CRNE 10-6 4 DN 40 0 - 10 bar - - 5,580 99071505 CRNE 10-9 5.5 DN 40 0 - 16 bar - - 6,775 99071850 CRNE 10-12 7.5 DN 40 0 - 25 bar - - 8,272 99071850 CRNE 10-17 11 DN 40 0 - 25 bar - - - 8,272 99071851 CRNE 15-1 1.5 DN 50 0 - 4 bar 3,225 98390752 3,437 98390782 CRNE 15-1 1.5 DN 50 0 - 10 bar - - 4,595 99071636 CRNE 15-3 4 DN 50 0 - 10 bar - - 5,505 99071636 CRNE 15-3 4 DN 50 0 - 10 bar - - 5,505 < | | | | | | | | |
| CRNE 10-5 3 DN 40 0 - 10 bar - - 4,653 99071504 CRNE 10-6 4 DN 40 0 - 10 bar - - 5,580 99071506 CRNE 10-9 5.5 DN 40 0 - 25 bar - - 6,775 99071850 CRNE 10-12 7.5 DN 40 0 - 25 bar - - 8,272 99071851 CRNE 10-17 11 DN 40 0 - 25 bar - - 10,626 99071852 CRNE 15-1 1.5 DN 50 0 - 4 bar 3,225 98390752 3,437 98390758 CRNE 15-1 1.5 DN 50 0 - 10 bar - - - 4,595 99071637 CRNE 15-3 4 DN 50 0 - 10 bar - - - 4,595 99071638 CRNE 15-4 5.5 DN 50 0 - 10 bar - - - - - - - - - - - - - | | | | | 3,234 | 98390336 | • | |
| CRNE 10-6 4 DN 40 0 - 10 bar - - 5,580 99071506 CRNE 10-9 5.5 DN 40 0 - 16 bar - - 6,775 99071850 CRNE 10-12 7.5 DN 40 0 - 25 bar - - 8,272 99071851 CRNE 10-17 11 DN 40 0 - 25 bar - - 8,272 99071851 CRNE 10-17 11 DN 40 0 - 25 bar - - 8,272 99071851 CRNE 10-17 11 DN 40 0 - 25 bar - - 10,626 99071851 CRNE 15-1 1.5 DN 50 0 - 4 bar 3,225 98390752 3,437 98390788 CRNE 15-2 3 DN 50 0 - 10 bar - - 4,595 99071636 CRNE 15-3 4 DN 50 0 - 10 bar - - - 5,505 99071637 CRNE 15-4 5.5 DN 50 0 - 10 bar - - - < | | | | | | <u>-</u> | | |
| CRNE 10-9 5.5 DN 40 0 - 16 bar - - 6,775 99071850 CRNE 10-12 7.5 DN 40 0 - 25 bar - - 8,272 99071851 CRNE 10-17 11 DN 40 0 - 25 bar - - - 8,272 99071851 CRNE 10-17 11 DN 40 0 - 25 bar - - - 8,272 99071851 CRNE 10-17 11 DN 40 0 - 25 bar - - - - 8,272 99071851 CRNE 10-17 11 DN 40 0 - 25 bar - <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td>-</td> <td></td> | | | | | | - | - | |
| CRNE 10-12 7.5 DN 40 0 - 25 bar - - 8,272 99071851 CRNE 10-17 11 DN 40 0 - 25 bar - - - 10,626 99071852 CRNE 15-1 1.5 DN 50 0 - 4 bar 3,225 98390752 3,437 98390758 CRNE 15-2 3 DN 50 0 - 10 bar - - 4,595 99071636 CRNE 15-3 4 DN 50 0 - 10 bar - - - 5,505 99071637 CRNE 15-4 5.5 DN 50 0 - 10 bar - - - - 6,580 99071637 CRNE 15-4 5.5 DN 50 0 - 16 bar - - - - 6,580 99071637 CRNE 15-5 7.5 DN 50 0 - 16 bar - | | | | | | - | | |
| CRNE 10-17 11 DN 40 0 - 25 bar - - 10,626 99071852 CRNE 15-1 1.5 DN 50 0 - 4 bar 3,225 98390752 3,437 98390758 CRNE 15-2 3 DN 50 0 - 10 bar - - 4,595 99071636 CRNE 15-3 4 DN 50 0 - 10 bar - - 5,505 99071637 CRNE 15-4 5.5 DN 50 0 - 10 bar - - 6,580 99071638 CRNE 15-5 7.5 DN 50 0 - 16 bar - - 6,580 99071640 CRNE 15-8 11 DN 50 0 - 25 bar - - 10,005 99071640 CRNE 15-10 15 DN 50 0 - 25 bar - - 10,005 99071641 CRNE 15-12 18.5 DN 50 0 - 25 bar - - 12,270 96514608 CRNE 20-1 2.2 DN 50 0 - 4 bar - - - 4,085 | CRNE 10-9 | | | | | - | | |
| CRNE 15-1 1.5 DN 50 0 - 4 bar 3,225 98390752 3,437 98390758 CRNE 15-2 3 DN 50 0 - 10 bar | | | | | | <u>-</u> | | |
| CRNE 15-2 3 DN 50 0 - 10 bar - - 4,595 99071636 CRNE 15-3 4 DN 50 0 - 10 bar - - - 5,505 99071637 CRNE 15-4 5.5 DN 50 0 - 10 bar - - 6,580 99071638 CRNE 15-5 7.5 DN 50 0 - 16 bar - - 7,775 99071640 CRNE 15-8 11 DN 50 0 - 25 bar - - 10,005 99071641 CRNE 15-10 15 DN 50 0 - 25 bar - - 12,270 96514607 CRNE 15-12 18.5 DN 50 0 - 25 bar - - 14,780 96514608 CRNE 20-1 2.2 DN 50 0 - 4 bar - - 4,085 98390798 CRNE 20-1 2.2 DN 50 0 - 6 bar - - 5,556 99071765 CRNE 20-2 4 DN 50 0 - 10 bar - - - 6,643 </td <td>CRNE 10-17</td> <td>11</td> <td>DN 40</td> <td>0 - 25 bar</td> <td></td> <td>-</td> <td>10,626</td> <td>99071852</td> | CRNE 10-17 | 11 | DN 40 | 0 - 25 bar | | - | 10,626 | 99071852 |
| CRNE 15-2 3 DN 50 0 - 10 bar - - 4,595 99071636 CRNE 15-3 4 DN 50 0 - 10 bar - - - 5,505 99071637 CRNE 15-4 5.5 DN 50 0 - 10 bar - - 6,580 99071638 CRNE 15-5 7.5 DN 50 0 - 16 bar - - 7,775 99071640 CRNE 15-8 11 DN 50 0 - 25 bar - - 10,005 99071641 CRNE 15-10 15 DN 50 0 - 25 bar - - 12,270 96514607 CRNE 15-12 18.5 DN 50 0 - 25 bar - - 14,780 96514608 CRNE 20-1 2.2 DN 50 0 - 4 bar - - 4,085 98390798 CRNE 20-1 2.2 DN 50 0 - 6 bar - - 5,556 99071765 CRNE 20-2 4 DN 50 0 - 10 bar - - - 6,643 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> | | | | | | | | |
| CRNE 15-3 4 DN 50 0 - 10 bar - - 5,505 99071637 CRNE 15-4 5.5 DN 50 0 - 10 bar - - 6,580 99071638 CRNE 15-5 7.5 DN 50 0 - 16 bar - - 7,775 99071640 CRNE 15-8 11 DN 50 0 - 25 bar - - 10,005 99071641 CRNE 15-10 15 DN 50 0 - 25 bar - - 12,270 96514607 CRNE 15-12 18.5 DN 50 0 - 25 bar - - 14,780 96514608 CRNE 20-1 2.2 DN 50 0 - 4 bar - - 4,085 98390798 CRNE 20-2 4 DN 50 0 - 6 bar - - 5,556 99071765 CRNE 20-3 5.5 DN 50 0 - 10 bar - - 6,643 99071766 CRNE 20-4 7.5 DN 50 0 - 10 bar - - 7,852 99071767 </td <td></td> <td></td> <td></td> <td></td> <td>3,225</td> <td>98390752</td> <td></td> <td></td> | | | | | 3,225 | 98390752 | | |
| CRNE 15-4 5.5 DN 50 0 - 10 bar - - 6,580 99071638 CRNE 15-5 7.5 DN 50 0 - 16 bar - - 7,775 99071640 CRNE 15-8 11 DN 50 0 - 25 bar - - 10,005 99071641 CRNE 15-10 15 DN 50 0 - 25 bar - - 12,270 96514607 CRNE 15-12 18.5 DN 50 0 - 25 bar - - - 14,780 96514608 CRNE 20-1 2.2 DN 50 0 - 4 bar - - - 4,085 98390798 CRNE 20-2 4 DN 50 0 - 6 bar - - 5,556 99071765 CRNE 20-3 5.5 DN 50 0 - 10 bar - - 6,643 99071766 CRNE 20-4 7.5 DN 50 0 - 10 bar - - 7,852 99071767 CRNE 20-6 11 DN 50 0 - 16 bar - - 10,1 | | | | | | - | - | |
| CRNE 15-5 7.5 DN 50 0 - 16 bar - - 7,775 99071640 CRNE 15-8 11 DN 50 0 - 25 bar - - 10,005 99071641 CRNE 15-10 15 DN 50 0 - 25 bar - - - 12,270 96514607 CRNE 15-12 18.5 DN 50 0 - 25 bar - - - 14,780 96514608 CRNE 20-1 2.2 DN 50 0 - 4 bar - - - 4,085 98390798 CRNE 20-2 4 DN 50 0 - 6 bar - - - 5,556 99071765 CRNE 20-3 5.5 DN 50 0 - 10 bar - - 6,643 99071766 CRNE 20-4 7.5 DN 50 0 - 10 bar - - 7,852 99071767 CRNE 20-6 11 DN 50 0 - 16 bar - - 10,103 99071768 CRNE 20-8 15 DN 50 0 - 25 bar - <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> | | | | | | | | |
| CRNE 15-8 11 DN 50 0 - 25 bar - - 10,005 99071641 CRNE 15-10 15 DN 50 0 - 25 bar - - - 12,270 96514607 CRNE 15-12 18.5 DN 50 0 - 25 bar - - - 14,780 96514608 CRNE 20-1 2.2 DN 50 0 - 4 bar - - - 4,085 98390798 CRNE 20-2 4 DN 50 0 - 6 bar - - - 5,556 99071765 CRNE 20-3 5.5 DN 50 0 - 10 bar - - 6,643 99071766 CRNE 20-4 7.5 DN 50 0 - 10 bar - - 7,852 99071767 CRNE 20-6 11 DN 50 0 - 16 bar - - 10,103 99071768 CRNE 20-8 15 DN 50 0 - 25 bar - - 12,401 96514731 | | | | | | | | |
| CRNE 15-10 15 DN 50 0 - 25 bar - - - 12,270 96514607 CRNE 15-12 18.5 DN 50 0 - 25 bar - - - 14,780 96514608 CRNE 20-1 2.2 DN 50 0 - 4 bar - - - 4,085 98390798 CRNE 20-2 4 DN 50 0 - 6 bar - - - 5,556 99071765 CRNE 20-3 5.5 DN 50 0 - 10 bar - - 6,643 99071766 CRNE 20-4 7.5 DN 50 0 - 10 bar - - 7,852 99071767 CRNE 20-6 11 DN 50 0 - 16 bar - - 10,103 99071768 CRNE 20-8 15 DN 50 0 - 25 bar - - 12,401 96514731 | | | | | | | | |
| CRNE 15-12 18.5 DN 50 0 - 25 bar - - 14,780 96514608 CRNE 20-1 2.2 DN 50 0 - 4 bar - - - 4,085 98390798 CRNE 20-2 4 DN 50 0 - 6 bar - - 5,556 99071765 CRNE 20-3 5.5 DN 50 0 - 10 bar - - 6,643 99071766 CRNE 20-4 7.5 DN 50 0 - 10 bar - - 7,852 99071767 CRNE 20-6 11 DN 50 0 - 16 bar - - 10,103 99071768 CRNE 20-8 15 DN 50 0 - 25 bar - - 12,401 96514731 | | | | | | | | |
| CRNE 20-1 2.2 DN 50 0 - 4 bar - - 4,085 98390798 CRNE 20-2 4 DN 50 0 - 6 bar - - 5,556 99071765 CRNE 20-3 5.5 DN 50 0 - 10 bar - - 6,643 99071766 CRNE 20-4 7.5 DN 50 0 - 10 bar - - 7,852 99071767 CRNE 20-6 11 DN 50 0 - 16 bar - - 10,103 99071768 CRNE 20-8 15 DN 50 0 - 25 bar - - 12,401 96514731 | | | | | | | | |
| CRNE 20-2 4 DN 50 0 - 6 bar - - - 5,556 99071765 CRNE 20-3 5.5 DN 50 0 - 10 bar - - - 6,643 99071766 CRNE 20-4 7.5 DN 50 0 - 10 bar - - - 7,852 99071767 CRNE 20-6 11 DN 50 0 - 16 bar - - 10,103 99071768 CRNE 20-8 15 DN 50 0 - 25 bar - - 12,401 96514731 | CRNE 15-12 | 18.5 | DN 50 | 0 - 25 bar | | - | 14,780 | 96514608 |
| CRNE 20-2 4 DN 50 0 - 6 bar - - - 5,556 99071765 CRNE 20-3 5.5 DN 50 0 - 10 bar - - - 6,643 99071766 CRNE 20-4 7.5 DN 50 0 - 10 bar - - - 7,852 99071767 CRNE 20-6 11 DN 50 0 - 16 bar - - 10,103 99071768 CRNE 20-8 15 DN 50 0 - 25 bar - - 12,401 96514731 | - | | | | | | | |
| CRNE 20-3 5.5 DN 50 0 - 10 bar - - 6,643 99071766 CRNE 20-4 7.5 DN 50 0 - 10 bar - - - 7,852 99071767 CRNE 20-6 11 DN 50 0 - 16 bar - - - 10,103 99071768 CRNE 20-8 15 DN 50 0 - 25 bar - - 12,401 96514731 | | | | | | | • | |
| CRNE 20-4 7.5 DN 50 0 - 10 bar - - 7,852 99071767 CRNE 20-6 11 DN 50 0 - 16 bar - - - 10,103 99071768 CRNE 20-8 15 DN 50 0 - 25 bar - - 12,401 96514731 | | | | | | | | |
| CRNE 20-6 11 DN 50 0 - 16 bar - - - 10,103 99071768 CRNE 20-8 15 DN 50 0 - 25 bar - - - 12,401 96514731 | | | | | | - | | |
| CRNE 20-8 15 DN 50 0 - 25 bar 12,401 96514731 | | | | | - | - | | |
| | | | | | | | | |
| CRNE 20-10 18.5 DN 50 0 - 25 bar - - 14,936 96514732 | | | | | | | | |
| | CRNE 20-10 | 18.5 | DN 50 | 0 - 25 bar | - | - | 14,936 | 96514732 |

CRNE OPERATION

These models have been designed for closed feedback loop variable speed control and are supplied with constant pressure transducers already fitted. The default control mode is "constant pressure".

A pressure vessel must be fitted on the discharge pipe close to the pressure sensor and a non-return valve should be fitted to the pump suction, on all CRNE pumps where the "stop" function is activated.

The above CRNE flanged models (FGJ) are DIN flanged as standard and are supplied **without** the counter flanges to EN 1092-2 1997 [was BS4504 : 1989] Please see page 44/45 for pipe connection accessories and list prices.

ELECTRIC MOTOR

For all E pumps the 60Hz pump performance is the same on both 50 or 60 Hz power supply

200-240V 1ph 50/60Hz

IE5 380-500V 3ph 50/60Hz up to 11kW

380-480V 3ph 50/60Hz above 15kW

IP55 Class F insulation

Pumps with Custom Built options such as special seals and non standard configurations can be configured and priced on request by your Sales Office.

IMPORTANT

A Grundfos GO based communication device will be required in order to commission the "E" product. See page 22 for details. This device can be used to commission and monitor multiple pumps on multiple sites.



CATEGORY 2 - CRNE32 to CRNE150

CRNE 316 STAINLESS STEEL VARIABLE SPEED PUMPS - WITHOUT AND WITH SENSOR

| | | | | 380-480/500V 3 ₁ | oh 50/60Hz | 380-480/500V 3 | ph 50/60Hz |
|--------------|------|------------|------------|-----------------------------|--------------|----------------|--------------|
| | | | | £ | Product Code | £ | Product Code |
| | P2 | Pipe | Transducer | WITHOUT S | ENSOR | WITH SE | NSOR |
| Model | kW | connection | Range | AFAEH | QQE | NFAEI | IQQE |
| CRNE 32-1-1 | 2.2 | DN 65 | 0 - 4 bar | 5,026 | 98390934 | 5,265 | 98390936 |
| CRNE 32-1 | 3 | DN 65 | 0 - 4 bar | 5,461 | 99071972 | 5,700 | 99071999 |
| CRNE 32-2-1 | 5.5 | DN 65 | 0 - 10 bar | 7,725 | 99071983 | 7,964 | 99072000 |
| CRNE 32-2 | 7.5 | DN 65 | 0 - 10 bar | 9,195 | 99071984 | 9,434 | 99072001 |
| CRNE 32-4-2 | 11 | DN 65 | 0 - 16 bar | 12,249 | 99071985 | 12,489 | 99072003 |
| CRNE 32-5-2 | 15 | DN 65 | 0 - 16 bar | 15,310 | 96122699 | 15,548 | 96122707 |
| CRNE 32-6 | 18.5 | DN 65 | 0 - 25 bar | 18,099 | 96122700 | 18,337 | 96122708 |
| CRNE 32-7 | 22 | DN 65 | 0 - 25 bar | 20,403 | 96122701 | 20,642 | 96122709 |
| | | | | - | | | |
| CRNE 45-1-1 | 5.5 | DN 80 | 0 - 6 bar | 7,439 | 99072029 | 7,673 | 99072049 |
| CRNE 45-1 | 7.5 | DN 80 | 0 - 6 bar | 9,020 | 99072030 | 9,255 | 99072050 |
| CRNE 45-2-1 | 11 | DN 80 | 0 - 10 bar | 11,735 | 99072031 | 11,971 | 99072052 |
| CRNE 45-2 | 15 | DN 80 | 0 - 10 bar | 14,688 | 96123437 | 14,921 | 96123445 |
| CRNE 45-3 | 18.5 | DN 80 | 0 - 16 bar | 17,375 | 96123438 | 17,611 | 96123446 |
| CRNE 45-4-2 | 22 | DN 80 | 0 - 16 bar | 19,837 | 96123439 | 20,073 | 96123447 |
| CDNE CA A A | 7.5 | DN 00 | 0 Chan | 0.003 | 00073070 | 0.220 | 00072007 |
| CRNE 64-1-1 | 7.5 | DN 80 | 0 - 6 bar | 8,993 | 99072078 | 9,228 | 99072087 |
| CRNE 64-1 | 11 | DN 80 | 0 - 6 bar | 11,903 | 99072079 | 12,139 | 99072088 |
| CRNE 64-2-2 | 15 | DN 80 | 0 - 10 bar | 14,308 | 96124018 | 14,544 | 96124023 |
| CRNE 64-2-1 | 18.5 | DN 80 | 0 - 10 bar | 16,931 | 96124019 | 17,166 | 96124024 |
| CRNE 64-3-2 | 22 | DN 80 | 0 - 16 bar | 19,190 | 96124020 | 19,426 | 96124025 |
| CRNE 95-1-1 | 11 | DN 100 | 0 - 6 bar | 12,034 | 99264375 | 12,269 | 99264434 |
| CRNE 95-1 | 15 | DN 100 | 0 - 6 bar | 14,854 | 99264376 | 15,089 | 99264435 |
| CRNE 95-2-2 | 18.5 | DN 100 | 0 - 10 bar | 17,174 | 99264377 | 17,409 | 99264436 |
| CRNE 95-2-1 | 22 | DN 100 | 0 - 10 bar | 19,331 | 99264378 | 19,567 | 99264437 |
| - | | | | | | | |
| CRNE 125-1-1 | 15.0 | DN 150 | 0 - 6 bar | 14,690 | 99264399 | 14,924 | 99264455 |
| CRNE 125-1 | 18.5 | DN 150 | 0 - 6 bar | 18,526 | 99264400 | 18,762 | 99264456 |
| CRNE 155-1-1 | 18.5 | DN 150 | 0 - 6 bar | 18,295 | 99264411 | 18,528 | 99264465 |
| | | | | , | | -,0=0 | |

CRNE OPERATION

Pumps without sensor are designed for operation in either open or closed loop control arrangements and the default control mode is "Constant Curve/Uncontrolled".

For closed loop control either differential pressure transducers, pressure transducers or temperature transducers can be supplied as separate items; as required.

Pressure transducers are listed with their ranges in the following tables as the recommended option.

Pumps with sensor are designed for closed loop variable speed control and are supplied with factory fitted pressure transducers. The default control mode is "constant pr

A pressure vessel must be fitted on the discharge pipe close to the pressure sensor and a non-return valve should be fitted to the pump suction, on all CRE pumps where the "stop" function is activated.

All of the above CRE pumps are supplied with flanged pump bases requiring round DIN counter flanges as the pipework connection. Please see page 46/47 for pipe connection accessories and list prices.

ELECTRIC MOTOR

For all E pumps the 60Hz pump performance is the same on both 50 or 60 Hz power supply 380-500V 3ph 50/60Hz up to 11kW with IE5 efficiency 380-480V 3ph 50/60Hz above 15kW IP55 Class F insulation

Pumps with Custom Built options such as special seals and non standard configurations can be configured and priced on request by your Sales Office.

IMPORTANT

A Grundfos GO based communication device will be required in order to commission the "E" product. See page 22 for details. This device can be used to commission and monitor multiple pumps on multiple sites.



CATEGORY 2 - CRN HIGH PRESSURE PUMPS

CRNE-HS HIGH PRESSURE PUMP COMPLETE WITH FREQUENCY CONTROLLED HIGH SPEED MOTOR

CRNE HS pumps are one pump solutions to high pressure applications

| Model | P2 | Pipework | |
|--------------|-----|------------|--|
| | kW | connection | |
| CRNE 1-23 HS | 4.6 | PJE 42.2mm | |
| CRNE 1-23 HS | 6 | PJE 42.2mm | |
| CRNE 1-23 HS | 7.5 | PJE 42.2mm | |
| CRNE3-23 HS | 4.6 | PJE 42.2mm | |
| CRNE3-23 HS | 6 | PJE 42.2mm | |
| CRNE3-23 HS | 7.5 | PJE 42.2mm | |
| | | | |

| £ | Product Code |
|------|--------------|
| QPTE | HQQE |
| POA | 99050536 |
| POA | 99050537 |
| POA | 99050538 |
| | |
| POA | 99050564 |
| POA | 99050565 |
| POA | 99050566 |

ELECTRIC MOTOR

380-500V 3ph 50/60Hz with IE5 efficiency

IP55 Class F insulation

For all E pumps the 50Hz pump performance is the same on 50 or 60 Hz supply

The above CRNE-HS pumps do not include sensor for closed loop control.

IMPORTANT

A Grundfos GO based communication device will be required in order to commission the "E" product. See page 22 for details.

This device can be used to commission and monitor multiple pumps on multiple sites.

CRN-SF HIGH PRESSURE PUMP COMPLETE WITH STANDARD FIXED SPEED MOTOR

CRN SF pumps are part of high pressure dual pump systems with a standard CRN feed pump in series (sold separately).

| Model | P2 | Pipework | |
|--------------|------|------------|--|
| | kW | connection | |
| CRN 3-31 SF | 3 | PJE 42.2mm | |
| CRN 5-34 SF | 5.5 | PJE 42.2mm | |
| CRN 10-21 SF | 7.5 | PJE 60.1mm | |
| CRN 15-16 SF | 15 | PJE 60.1mm | |
| CRN 20-16 SF | 18.5 | PJE 60.1mm | |
| | P2 | Pipework | |

| 7,507 | 96512200 | | | | |
|---------------|--------------|--|--|--|--|
| 10,960 | 96512213 | | | | |
| 11,630 | 96512261 | | | | |
| | | | | | |
| £ | Product Code | | | | |
| SF P A E HQQE | | | | | |
| POA | 97515507 | | | | |

S P A E HQQE

4,345

2,692

Product Code

96892938

96521769

| | P2 | Pipework |
|--------------|----|------------|
| | kW | connection |
| CRN 32-13 SF | 30 | PJE 88.9mm |
| CRN 45-12 SF | 45 | PJE 114mm |
| CRN 64-7 SF | 45 | PJE 114mm |

| JEFALI | IQQL |
|--------|----------|
| POA | 97515507 |
| POA | 97515508 |
| POA | 97566802 |
| | |

ELECTRIC MOTOR

380-415V 3ph 50Hz

IP55 Class F insulation

All 3 Phase motors 0.75kW and above are IE3 Efficiency.

PIPE CONNECTIONS

All CRN High Pressure models are supplied $\mbox{\it without}$ PJE couplings.

Installation of CRN SF pumps

The smaller standard feed pump is the first pump in series.

The smaller first pump could be variable speed if required.

The large high pressure pump (SF) is installed as the second unit.



| CRN-SF ACCESSORIES | | | | | | | |
|---------------------------------|---------------|----------|-------------|-------|---------|-----|--------------|
| PJE couplings with pipe stub | Elastomer | Material | Pipe stub | PN | No Reqd | £ | Product Code |
| 42.2mm / DN32 | EPDM | 316 SS | for welding | 80bar | 2 | 89 | 419912 |
| 60.1mm / DN50 | EPDM | 316 SS | for welding | 70bar | 2 | 89 | 339910 |
| 88.9mm / DN80 | EPDM | 316 SS | for welding | 70bar | 2 | 295 | 98144746 |
| 114mm / DN100 | EPDM | 316 SS | for welding | 70bar | 2 | 487 | 98144752 |
| PJE couplings without pipe stub | | | | | No Reqd | £ | Product Code |
| 42.2mm | | | | | 2 | 49 | 00ID1781 |
| 60.1mm | | | | | 2 | 52 | 00ID2643 |
| 88.9mm | | | | | 2 | 98 | 00ID5530 |
| 114mm | | | | | 2 | 137 | 96483370 |
| Connecting pipe | For pump type | | | | No Reqd | £ | Product Code |
| 42.2mm / DN32 | CRN 3/5 | | | | 1 | 343 | 98895730 |
| 60.1mm / DN50 | CRN 10/15/20 | | | | 1 | 141 | 420138 |
| 88.9mm / DN80 | CRN 32 | | | | 1 | 431 | 98144757 |
| 114mm / DN100 | CRN 45/64/90 | | | | 1 | 645 | 98144759 |

CATEGORY 2 - CRT TITANIUM VERTICAL MULTISTAGE PUMPS

COMPLETE WITH DIRECT COUPLED 2900 RPM ELECTRIC MOTOR

| | | 23UV 1 | pn sunz |
|---------|------|--------|--------------|
| | P2 | £ | Product Code |
| Model | kW | APA | AUUE |
| CRT2-2 | 0.37 | 2,842 | 96100265 |
| CRT2-3 | 0.37 | 2,980 | 96100266 |
| CRT2-4 | 0.55 | 3,271 | 96100267 |
| CRT2-5 | 0.55 | 3,577 | 96100268 |
| CRT2-6 | 0.75 | 3,988 | 96100269 |
| CRT2-7 | 0.75 | 4,346 | 96100270 |
| CRT2-9 | 1.1 | 4,824 | 96100271 |
| CRT2-11 | 1.1 | 5,359 | 96100272 |
| CRT2-13 | 1.5 | 6,043 | 96100273 |
| CRT2-15 | 1.5 | 6,614 | 96100274 |
| CRT2-18 | 2.2 | 7,336 | 96100275 |
| CRT2-22 | 2.2 | 8,232 | 96100276 |
| | | | |

| CRT4-1 | 0.37 | 3,047 | 96100764 |
|---------|------|-------|----------|
| CRT4-2 | 0.37 | 3,191 | 96100765 |
| CRT4-3 | 0.55 | 3,500 | 96100766 |
| CRT4-4 | 0.75 | 3,989 | 96100767 |
| CRT4-5 | 1.1 | 4,656 | 96100768 |
| CRT4-6 | 1.1 | 5,052 | 96100769 |
| CRT4-7 | 1.5 | 5,808 | 96100770 |
| CRT4-8 | 1.5 | 6,196 | 96100771 |
| CRT4-10 | 2.2 | 7,077 | 96100772 |
| CRT4-12 | 2.2 | 7,502 | 96100773 |
| | | | |

ELECTRIC MOTOR

380-415V 3ph 50Hz

220-240V 1ph 50Hz

IP55 Class F insulation

All 3 Phase motors 0.75kW and above are IE3 Efficiency.

All List prices ${\it exclude}$ Titanium/EPDM PJE couplings - details are listed below.

CRTE specification

All CRT pumps are available with "E" motors. Any enquiry for CRTE2, CRTE4, CRTE8 and CRTE16 can be configured and priced by your Sales Office.

CRT "Flanged" specification

The CRT range is now available with Universal FGJ Flanges.

The extra for a FGJ Flanged pumps are available on request.



| | | 400V 3ph 50Hz | | |
|----------|------|---------------|--------------|--|
| | P2 | £ | Product Code | |
| Model | kW | APA | AUUE | |
| CRT2-2 | 0.37 | 2,777 | 96100301 | |
| CRT2-3 | 0.37 | 2,964 | 96100302 | |
| CRT2-4 | 0.55 | 3,177 | 96100303 | |
| CRT2-5 | 0.55 | 3,665 | 96100304 | |
| CRT2-6 | 0.75 | 3,821 | 96100305 | |
| CRT2-7 | 0.75 | 4,300 | 96100306 | |
| CRT2-9 | 1.1 | 4,553 | 96100307 | |
| CRT2-11 | 1.1 | 5,120 | 96100308 | |
| CRT2-13 | 1.5 | 5,679 | 96100309 | |
| CRT2-15 | 1.5 | 6,251 | 96100310 | |
| CRT2-18 | 2.2 | 6,940 | 96100311 | |
| CRT2-22 | 2.2 | 7,838 | 96100312 | |
| CRT2-26 | 3 | 8,711 | 96100313 | |
| | | | | |
| CRT4-1 | 0.37 | 2,730 | 96100794 | |
| CRT4-2 | 0.37 | 3,126 | 96100795 | |
| CRT4-3 | 0.55 | 3,405 | 96100796 | |
| CRT4-4 | 0.75 | 3,821 | 96100797 | |
| CRT4-5 | 1.1 | 4,381 | 96100798 | |
| CRT4-6 | 1.1 | 4,778 | 96100799 | |
| CRT4-7 | 1.5 | 5,440 | 96100800 | |
| CRT4-8 | 1.5 | 5,827 | 96100801 | |
| CRT4-10 | 2.2 | 7,070 | 96100802 | |
| CRT4-12 | 2.2 | 7,100 | 96100803 | |
| CRT4-14 | 3 | 8,217 | 96100804 | |
| CRT4-16 | 3 | 8,641 | 96100805 | |
| CRT4-19 | 4 | 9,928 | 96100806 | |
| CRT4-22 | 4 | 10,866 | 96100807 | |
| CRT8-1 | 0.37 | 5,133 | 96108239 | |
| CRT8-2 | 0.75 | 5,366 | 96108240 | |
| CRT8-3 | 1.1 | 5,790 | 96108241 | |
| CRT8-4 | 1.5 | 6,557 | 96108242 | |
| CRT8-5 | 2.2 | 7,150 | 96108243 | |
| CRT8-6 | 2.2 | 7,566 | 96108244 | |
| CRT8-8 | 3 | 8,803 | 96108245 | |
| CRT8-10 | 4 | 10,146 | 96117229 | |
| CRT8-12 | 4 | 11,056 | 96117230 | |
| CRT8-14 | 5.5 | 13,134 | 96117231 | |
| CRT8-16 | 5.5 | 14,147 | 96117232 | |
| CRT8-18 | 7.5 | 16,644 | 96117233 | |
| CRT8-20 | 7.5 | 17,651 | 96117234 | |
| CRT16-2 | 2.2 | 6,223 | 96108344 | |
| CRT16-3 | 3 | 7,579 | 96108345 | |
| CRT16-4 | 4 | 8,817 | 96117246 | |
| CRT16-5 | 5.5 | 10,737 | 96117247 | |
| CRT16-6 | 5.5 | 11,521 | 96117248 | |
| CRT16-7 | 7.5 | 12,808 | 96117249 | |
| CRT16-8 | 7.5 | 13,707 | 96117250 | |
| CRT16-10 | 11 | 16,972 | 96117251 | |
| CRT16-12 | 11 | 17,988 | 96117252 | |
| CRT16-14 | 15 | 22,316 | 96117253 | |
| CRT16-17 | 18.5 | 23,563 | 96117254 | |
| | | , | | |

PJE COUPLINGS FOR CRT PUMPS

| CRT ACCESSORIES | | No Reqd | £ | Product Code |
|----------------------------------|-------------|---------|-----|--------------|
| PJE threaded couplings with EPDM | CRT2 and 4 | 2 | 213 | 415520 |
| seals | CRT8 and 16 | 2 | 267 | 425935 |

| | | No Reqd | £ | Product Code |
|---------------------------------|-------------|---------|-----|--------------|
| Viton seals are available as an | CRT2 and 4 | 2 | 171 | 00ID6742 |
| optional extra. | CRT8 and 16 | 2 | 327 | 98977142 |





CATEGORY 2 - CRI/CRIE, CR/CRE AND CRN/CRNE FLANGE AND PIPE COUPLING LIST PRICES **COUNTER FLANGES FOR CR/CRI/CRN PUMPS** Pump type and Pipe Pump Туре PN rating Nº Reqd Material £ **Product Code** size Connection connection CRI 1s/1/3 Welding 25 bar Steel St37-2 59 409902 FGJ 25mm CRI 5 FGJ Welding 32mm 25 bar 2 Steel St37-2 81 419902 CRI 10 FGJ Welding 40mm 25 bar 2 Steel St37-2 106 429901 FGJ Threaded 2" BSPF 16 bar 2 Steel St37-2 116 339903 CRI 15/20 Welding FGJ 50mm 25 bar 2 Steel St37-2 141 339901 F 2" 1/2 BSPF 16 bar Steel St37-2 81 Threaded 349902 CR 32 F 3" BSPF Steel St37-2 76 Threaded 16 bar 349901 F Welding 65 mm 40 bar Steel St37-2 169 349905 F 16 bar Steel St37-2 98 350540 Threaded 3" BSPF CR 45 F Welding 2 80mm 40 bar Steel St37-2 169 350542 F Threaded 4" BSPF 16 bar Steel St37-2 116 369901 CR 64/95 Welding 100 mm 25 bar Steel St37-2 133 369905 CR 125/155 F Welding 150 mm 40 bar 2 Steel St37-2 396 96750476 CRI/CRN 1s/1/3 FGJ Threaded 1" BSPF 25 bar 316 stainless steel 348 91200656 CRI/CRN 5 FGJ Threaded 1" 1/4 BSPI 25 bar 316 stainless steel 341 91200657 FGJ 1" ½ BSPF 16 bar 372 Threaded 316 stainless steel 91201023 CRI/CRN 10 FGJ Welding 40 bar 236 40 mm 316 stainless steel 91201025 FGJ Threaded 2" BSPF 16 bar 316 stainless steel 245 91201026 CRI/CRN 15/20 FGJ Welding 50 mm 40 bar 255 91201028 316 stainless steel F Threaded 2" 1/2 BSPF 16 bar 2 316 stainless steel 355 349910 **CRN 32** F 349911 Threaded 3" BSPF 16 bar 316 stainless steel 355 F Welding 355 65 mm 40 bar 316 stainless steel 349908 F Threaded 3" BSPF 16 bar 316 stainless steel 534 350543 CRN 45 Welding 80 mm 40 bar 316 stainless steel 534 350545 F 4" BSPF POA 16 bar 316 stainless steel 369904 Threaded CRN 64/95 F Welding 100 mm 40 bar 2 316 stainless steel 577 369906 Welding 150 mm 16 bar 316 stainless steel 480 98052936 CRN 125/155 Welding F 150 mm 40 har 316 stainless steel 1,363 96750478 NOTE - THE ABOVE COUNTER FLANGES ARE CATEGORY 4 ITEMS DISCOUNT PURPOSES.

One circular four bolt DIN counter flange kit is supplied with 4 bolts, 4 nuts and 1 gasket. [2 kits required per pump] DIN counter flange kits are pressure rated to EN 1092-2 [ex BS4504:1989].

All counter flanges are uncoated



| Pump type and | Pump | Туре | Size | PN rating | Nº Regd | Rubber | £ | Product Code |
|---------------|------------|----------|-----------|-----------|---------|--------|-----|--------------|
| size | Connection | туре | 3126 | Fiviating | N- Nequ | Rubbei | _ | Floudet Code |
| | PJE | Threaded | 1" ¼ BSPF | 69 bar | 2 | EPDM | 89 | 419911 |
| CRN 1s/1/3/5 | PJE | Threaded | 1" ¼ BSPF | 69 bar | 2 | FKM | 222 | 419905 |
| CKN 15/1/5/5 | PJE | Welding | 32mm | 69 bar | 2 | EPDM | 89 | 419912 |
| | PJE | Welding | 32mm | 69 bar | 2 | FKM | 222 | 419904 |
| CRN 10/15/20 | PJE | Threaded | 2" BSPF | 69 bar | 2 | EPDM | 89 | 339911 |
| | PJE | Threaded | 2" BSPF | 69 bar | 2 | FKM | 222 | 339918 |
| | PJE | Welding | 50 mm | 69 bar | 2 | EPDM | 89 | 339910 |
| | PJE | Welding | 50 mm | 69 bar | 2 | FKM | 222 | 339917 |

PJE pipe couplings in 316 stainless steel.

A set consists of two coupling halves (Victaulic type 77), one gasket, one pipe stub (for welding or threaded), bolts and nuts. PJE couplings are only required on new installations. CRN 1s, 1, 3, 5, 10, 15 & 20 PJE pump replacements do not require them.



CATEGORY 2 - CRI/CRIE, CR/CRE AND CRN/CRNE FLANGE AND PIPE COUPLING LIST PRICES

FLEXICLAMP COUPLINGS FOR CRI PUMPS

| Pump type and size | Pump Connection | Туре | Size | PN rating | Nº Reqd | Rubber | £ | Product Code |
|--------------------|--------------------|--------------------------|-----------|-----------|---------|------------|----------|--------------|
| | CA | 2 bolt oval | 1" BSPF | 16 bar | 2 | Klingersil | 63 | 96449746 |
| CRI 1s/1/3/5 | CA | 2 bolt oval | 1" ¼ BSPF | 16 bar | 2 | Klingersil | 63 | 96449747 |
| CKI 15/1/5/5 | CA | DIN Flange | DN 25/32 | 16 bar | 2 | EPDM | 267 | 96449745 |
| | CA | DIN Flange DN 25/32 16 b | 16 bar | 2 | FKM | 284 | 96449900 | |
| | CA | 2 bolt oval | 1" ½ BSPF | 16 bar | 2 | Klingersil | 84 | 96498728 |
| | CA | 2 bolt oval | 2" BSPF | 16 bar | 2 | Klingersil | 89 | 96498835 |
| CRI 10/15/20 | CA | DIN Flange | DN 40 | 16 bar | 2 | EPDM | 186 | 96500263 |
| CKI 10/15/20 | CA | DIN Flange | DN 40 | 16 bar | 2 | FKM | 261 | 96500264 |
| | CA | DIN Flange | DN 50 | 16 bar | 2 | EPDM | 203 | 96500267 |
| • | CA | DIN Flange | DN 50 | 16 bar | 2 | FKM | POA | 96500269 |

NOTE - THE ABOVE FLEXICLAMP COUPLINGS ARE CATEGORY 2 ITEMS DISCOUNT PURPOSES.

One 2 bolt oval flange kit contains 1 stainless steel flange, 2 bolts/nuts & 1 gasket [2 kits required for each new CRI pump].







Rolt kit

| | | No Reqd | £ | Product Code |
|--|----------------------------|---------|----|--------------|
| Bolt kit for use replacing the CR2 with CRI 3 CA base | M10x70mm bolts, nuts, gask | 1 | 71 | 96449748 |
| Bolt kit for use replacing the CR4 with CRI 5 CA base | M10x70mm bolts, nuts, gask | 1 | 71 | 96449749 |
| Bolt kit for use replacing the CR8 with CRI 10 CA base | M12x90mm bolts, nuts, gask | 2 | 63 | 96498727 |

NOTE - THE ABOVE FLEXICLAMP COUPLINGS ARE CATEGORY 2 ITEMS DISCOUNT PURPOSES.

Replacement bolt kits contain flanges, gaskets, nuts & bolts but normally only provide longer bolts and gaskets to enable the CR2, CR4 & CR8 2 bolt base pump to be replaced with the CRI CA base pump when using existing cast iron 2 bolt oval flanges.

ADAPTERS FOR LEGACY PRODUCTS

CR 30 / CRN 30 AND CR 60 / CRN 60 ADAPTER RAILS

The adaptor rail price includes one rail (two required per pump) and are necessary if fitting a CR(N)32 pump to existing CR(N)30 foundation mountings.

| | No Reqd | £ | Product Code |
|---|---------|-----|--------------|
| CR/CRN 30-10 to CR/CRN 30-80 replaced by a CR/CRN32 | 2 | 92 | 96547329 |
| CR/CRN 30-110/9 to CR/CRN 30-160 replaced by a CR/CRN32 | 2 | 146 | 96587892 |
| CR/CRN 60-20 to CR/CRN 60-80 replaced by a CR/CRN64 | 2 | 107 | 96587893 |



| CR120 / CR150 ACCESSORIES | No Reqd | £ | Product Code |
|---------------------------------|---------|-------|---------------------|
| DN125 PN40 weld counter flanges | 2 | 274 | 96750475 |
| DN125 to DN150 adapter kit | 2 | 594 | 96638169 |
| | | | |
| CRN120 / CRN150 ACCESSORIES | No Reqd | £ | Product Code |
| DN125 PN40 weld counter flanges | 2 | 915 | 96750477 |
| DN125 to DN150 adapter kit | 2 | 1,830 | 96638180 |

NOTE - THE ABOVE ADAPTERS ARE CATEGORY 4 ITEMS DISCOUNT PURPOSES.

LIQTEC - DRY RUNNING PROTECTION

The most common cause of pump failure is dry running.

Grundfos' dry running protection device, the LiqTec, stops the pump running, via the motor's contactor starter, if there is no liquid in the vicinity of the shaft seal.

The sensor is specifically designed to be installed on the CR, CRI, CRN and MTR range of pumps where an auxiliary connection is available on the pump's top casting.

Use on single pump installations only and not on packaged sets where alternative protection is normally provided.





| | £ | Product Code |
|---|-------|--------------|
| LiqTec with sensor and 5m of interconnection cable (200-240V) | 1,394 | 96556429 |
| LiqTec with sensor and 5m of interconnection cable (80-130V) | 1,688 | 96556430 |
| Extra 15m sensor cable kit | 222 | 96443676 |
| For new permanent magnet MGE motors, models H, I and J | £ | Product Code |
| LiqTec sensor unit with 5m cable | 268 | 99337830 |

NOTE - THE ABOVE LIQTEC IS A CATEGORY 2 PRODUCT FOR DISCOUNT PURPOSES.

CATEGORY 2 - CM- I 304 STAINLESS STEEL HORIZONTAL MULTISTAGE PUMPS 50Hz

COMPLETE WITH DIRECT COUPLED 2900 RPM ELECTRIC MOTOR

230V 1nh 50Hz

| | 230V 1ph 50Hz | | | _ | 400V 3p | h 50Hz | |
|------------------------------------|---------------------------------------|---------------------------------------|---------------------|-------------|---------------------|---------|--------------------|
| | | £ | Product Code | | _ | £ | Product Cod |
| Model | P2 (kW) / Frame | CMx-x A R | I E AQQE CAAN | Model | P2 (kW) / Frame | CMx-x A | R I E AQQE FAAI |
| CM 1-2-I | 0.30 / 71 | 702 | 97514162 | CM 1-2-I | 0.46 / 71 | 686 | 9751441 |
| CM 1-3-I | 0.30 / 71 | 770 | 97514439 | CM 1-3-I | 0.46 / 71 | 754 | 9751510 |
| CM 1-4-I | 0.50 / 71 | 831 | 97514999 | CM 1-4-I | 0.46 / 71 | 807 | 9751512 |
| CM 1-5-I | 0.50 / 71 | 890 | 97515000 | CM 1-5-I | 0.46 / 71 | 868 | 9680701 |
| CM 1-6-I | 0.50 / 71 | 901 | 97515021 | CM 1-6-I | 0.46 / 71 | 877 | 9751512 |
| CM 1-7-I | 0.50 / 71 | 1,018 | 97515023 | CM 1-7-I | 0.65 / 71 | 994 | 9751512 |
| CM 1-8-I | 0.67 / 80 | 1,051 | 97515024 | CM 1-8-I | 0.65 / 71 | 1,018 | 9697690 |
| CM 1-9-I | 0.67 / 80 | 1,068 | 97644331 | CM 1-9-I | 0.65 / 71 | 1,034 | 9764433 |
| CM 1-10-I | 0.67 / 80 | 1,096 | 97644334 | CM 1-10-I | 1.1 / 80 | 1,061 | 9866277 |
| CM 1-10-1 | 0.90 / 80 | 1,189 | 97644335 | CM 1-11-I | 1.1 / 80 | 1,142 | 9869463 |
| CM 1-12-I | 0.90 / 80 | 1,272 | 97644336 | CM 1-11-I | 1.1 / 80 | 1,226 | 9869463 |
| CM 1-13-I | 0.90 / 80 | 1,329 | 97577832 | CM 1-13-I | 1.1 / 80 | 1,283 | |
| | 1.30 / 90 | • | | CM 1-14-I | 1.1 / 80 | | 9869463 9869463 |
| CM 1-14-I | 1.50 / 90 | 1,815 | 97644337 | CIVI 1-14-I | 1.1 / 60 | 1,497 | 3003403 |
| CM 3-2-I | 0.30 / 71 | 731 | 96961011 | CM 3-2-I | 0.46 / 71 | 715 | 9696102 |
| CM 3-3-I | 0.50 / 71 | 788 | 96961025 | CM 3-3-I | 0.46 / 71 | 765 | 9696102 |
| CM 3-4-I | 0.50 / 71 | 841 | 96961025 | CM 3-4-I | 0.46 / 71 | 819 | 9696104 |
| :M 3-5-I | | 903 | 96961043 | CM 3-5-I | 0.65 / 71 | 878 | 9696104 |
| | 0.50 / 71 0.67 / 80 | | | | · | 979 | |
| CM 3-6-I | · · · · · · · · · · · · · · · · · · · | 1,012 | 97515032 | CM 3-6-I | 0.65 / 71 | | 9751512 9866272 |
| CM 3-7-I | 0.90 / 80 | 1,093 | 97515033 | CM 3-7-I | 1.1 / 80 | 1,047 | |
| CM 3-8-I | 0.90 / 80 | 1,164 | 97515034 | CM 3-8-I | 1.1 / 80 | 1,117 | 9872522 |
| CM 3-9-I | 1.30 / 90 | 1,503 | 97569313 | CM 3-9-I | 1.1 / 80 | 1,184 | 9908020 |
| CM 3-10-I | 1.30 / 90 | 1,589 | 97644339 | CM 3-10-I | 1.5 / 90 | 1,271 | 9905980 |
| CM 3-11-I | 1.30 / 90 | 1,758 | 97620738 | CM 3-11-I | 1.5 / 90 | 1,440 | 9869463 |
| CM 3-12-I | 1.30 / 90 | 1,805 | 97644340 | CM 3-12-I | 1.5 / 90 | 1,485 | 9908020 |
| CM 3-13-I | 1.70 / 90 | 1,862 | 97621172 | CM 3-13-I | 2.2 / 90 | 1,513 | 9869463 |
| CM 3-14-I | 1.70 / 90 | 1,892 | 97644352 | CM 3-14-I | 2.2 / 90 | 1,544 | 9869463 |
| CM 5-2-I | 0.50 / 71 | 724 | 97515042 | CM 5-2-I | 0.46 / 71 | 700 | 9696105 |
| CM 5-3-I | 0.50 / 71 | 840 | 97515044 | CM 5-3-I | 0.65 / 71 | 817 | 9696105 |
| CM 5-4-I | 0.67 / 80 | 1,011 | 96961065 | CM 5-4-I | 1.1 / 80 | 978 | 9879851 |
| CM 5-5-I | 0.90 / 80 | 1,112 | 96961097 | CM 5-5-I | 1.1 / 80 | 1,065 | 9872531 |
| CM 5-6-I | 1.30 / 90 | 1,466 | 97507749 | CM 5-6-I | 1.5 / 90 | 1,149 | 9866418 |
| CM 5-7-I | 1.30 / 90 | 1,621 | 97515047 | CM 5-7-I | 1.5 / 90 | 1,303 | 9872522 |
| CM 5-8-I | 1.70 / 90 | 1,685 | 97515048 | CM 5-8-I | 2.2 / 90 | 1,336 | 9871794 |
| CM 5-9-I | 1.70 / 90 | 1,862 | 97644353 | CM 5-9-I | 2.2 / 90 | 1,514 | 9889634 |
| CM 5-10-I | 1.70 / 90 | 1,915 | 97621173 | CM 5-10-I | 2.2 / 90 | 1,568 | 9905980 |
| CM 5-11-I | 1.70 / 90 | 2,022 | 97620739 | CM 5-11-I | 2.2 / 90 | 1,675 | 9908020 |
| | · | · · · · · · · · · · · · · · · · · · · | | CM 5-12-I | 3 / 100 | 2,000 | 9869464 |
| CM 10-1-I | 0.67 / 80 | 1,096 | 97515062 | CM 5-13-I | 3 / 100 | 2,067 | 9869464 |
| M 10-2-I | 1.30 / 90 | 1,457 | 96946004 | | , | | |
| CM 10-3-I | 1.70 / 90 | 1,789 | 96946005 | CM 10-1-I | 0.65 / 71 | 1,061 | 9751513 |
| | 20 / 30 | -, | | CM 10-2-I | 1.5 / 90 | 1,138 | 9871939 |
| CM 15-1-I | 1.30 / 90 | 2,013 | 97515064 | CM 10-3-I | 2.2 / 90 | 1,440 | 9869360 |
| CM 15-1-I | 1.70 / 90 | 2,290 | 97515063 | CM 10-4-I | 3 / 100 | 1,965 | 9877705 |
| .ı•ı ±J | 1.70 30 | 2,230 | 37313003 | CM 10-5-I | 3 / 100 | 2,126 | 9897929 |
| CM 25-1-I | 1.70 / 90 | 2,210 | 97515065 | CM 10-6-I | 4 / 112 | 2,126 | 9905708 |
| /ITI &J-1-1 | 1.70 / 30 | 2,210 | 3,313003 | CM 10-7-I | 5.5 / 132 | 2,340 | 9869464 |
| ELECTRIC MOTOR | | Seal materials | | CM 10-8-I | 5.5 / 132 | 2,790 | 9869464 |
| | | AQQE seal has SiC Si | C coal faces | CIVI 10-0-I | 3.3 / 132 | 2,730 | 3003404 |
| 880-415V 3ph | | | | CM 1E 1 L | 1 5 / 90 | 1 604 | 0000740 |
| 20-240V 1ph | | and EPDM elastome | I | CM 15-1-I | 1.5 / 80 | 1,694 | 9908749 |
| P55 Class F ins | Suidtion | Pump materials | 204 stainteen | CM 15-2-I | 2.2 / 90 | 1,941 | 9908020 |
| | | CM x - x I pumps are | 304 Stainless steel | CM 15-3-I | 4 / 112 | 2,233 | 9866972 |
| Pump pipe cor | | (EN1.4301) | | CM 15-4-I | 5.5 / 132 | 2,505 | 9895845 |
| M 1 & CM3 - | | 1"RSDE | | CM 25-1-I | 2.2 / 90 | 1,862 | 0907024 |
| .ivi 5 - Suction .M 10 - Both 1 | 1"1/4BSPF Discharge | בו מארני די | | CM 25-1-I | 2.2 / 90 4 / 112 | 2,596 | 9897936 9869360 |
| "INI TO - DOILI I | L 1/4D3FF | | | | | | |

Pumps with Custom Built options such as alternative seals, alternative materials different voltage ranges etc can be configured and priced on request by your Sales Office. Flange adaptors, PJE and Tri-Clamp connectors are available on request.

ADAPTOR BASEPLATES

CM 10 - Both 1"1/2BSPF

CM 15 & CM25 - Both 2"BSPF

For assisting with the replacement of CH, CHN and CHI units with motor frame size 71/80 only - see page 53.



98693604

98935349

99205260

2,596

3,208

3,721

400V 3nh 50Hz

CM 25-2-I

CM 25-3-I

CM 25-4-I

4 / 112

5.5 / 132

7.5 / 132

CATEGORY 2 CM - G 316 STAINLESS STEEL HORIZONTAL MULTISTAGE PUMPS 50Hz

COMPLETE WITH DIRECT COUPLED 2900 RPM ELECTRIC MOTOR

| 001111111111111111111111111111111111111 | | 230V 1p | oh 50Hz | • |
|---|---------------------------------------|---------------------------------------|-----------------|-----------|
| | _ | £ | Product Code | |
| Model | P2 (kW) / Frame | | R G E AQQE CAAN | Model |
| CM 1-2-G | 0.30 / 71 | 886 | 97516635 | CM 1-2-0 |
| CM 1-3-G | 0.30 / 71 | 983 | 97516636 | CM 1-3-0 |
| CM 1-4-G | 0.50 / 71 | 1,047 | 97516638 | CM 1-4-G |
| CM 1-5-G | 0.50 / 71 | 1,110 | 97516640 | CM 1-5-G |
| CM 1-6-G | 0.50 / 71 | 1,137 | 97516642 | CM 1-6-0 |
| CM 1-7-G | 0.50 / 71 | 1,235 | 97516644 | CM 1-7-0 |
| CM 1-8-G | 0.67 / 80 | 1,325 | 97516646 | CM 1-8-G |
| CM 1-9-G | 0.67 / 80 | 1,347 | 97515025 | CM 1-9-0 |
| CM 1-10-G | 0.67 / 80 | 1,386 | 97515026 | CM 1-10- |
| CM 1-11-G | 0.90 / 80 | 1,499 | 96935421 | CM 1-11- |
| CM 1-12-G | 0.90 / 80 | 1,606 | 96935423 | CM 1-12- |
| CM 1-13-G | 0.90 / 80 | 1,679 | 96935425 | CM 1-13- |
| CM 1-14-G | 1.30 / 90 | 2,224 | 96935427 | CM 1-14- |
| | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · | | |
| CM 3-2-G | 0.30 / 71 | 921 | 96806880 | CM 3-2-G |
| CM 3-3-G | 0.50 / 71 | 992 | 96806865 | CM 3-3-G |
| CM 3-4-G | 0.50 / 71 | 1,058 | 96806889 | CM 3-4-0 |
| CM 3-5-G | 0.50 / 71 | 1,142 | 96806882 | CM 3-5-G |
| CM 3-6-G | 0.67 / 80 | 1,245 | 97516648 | CM 3-6-0 |
| CM 3-7-G | 0.90 / 80 | 1,312 | 97516650 | CM 3-7-G |
| CM 3-8-G | 0.90 / 80 | 1,436 | 97516652 | CM 3-8-0 |
| CM 3-9-G | 1.30 / 90 | 1,815 | 97515035 | CM 3-9-G |
| CM 3-10-G | 1.30 / 90 | 1,929 | 97515036 | CM 3-10- |
| CM 3-11-G | 1.30 / 90 | 2,136 | 96935447 | CM 3-11- |
| CM 3-12-G | 1.30 / 90 | 2,202 | 96935449 | CM 3-12- |
| CM 3-13-G | 1.70 / 90 | 2,266 | 96935451 | CM 3-13- |
| CM 3-14-G | 1.70 / 90 | 2,304 | 96935453 | CM 3-14- |
| | ., | , | | |
| CM 5-2-G | 0.50 / 71 | 941 | 97516654 | CM 5-2-G |
| CM 5-3-G | 0.50 / 71 | 1,109 | 97516655 | CM 5-3-0 |
| CM 5-4-G | 0.67 / 80 | 1,191 | 96806893 | CM 5-4-0 |
| CM 5-5-G | 0.90 / 80 | 1,386 | 96806881 | CM 5-5-0 |
| CM 5-6-G | 1.30 / 90 | 1,775 | 97516656 | CM 5-6-G |
| CM 5-7-G | 1.30 / 90 | 1,969 | 97516657 | CM 5-7-0 |
| CM 5-8-G | 1.70 / 90 | 2,045 | 97516658 | CM 5-8-0 |
| CM 5-9-G | 1.70 / 90 | 2,273 | 97515050 | CM 5-9-0 |
| CM 5-10-G | 1.70 / 90 | 2,340 | 97515061 | CM 5-10- |
| CM 5-11-G | 1.70 / 90 | 2,477 | 96935475 | CM 5-11- |
| | | · · · · · · · · · · · · · · · · · · · | | CM 5-12- |
| CM 10-1-G | 0.67 / 80 | 1,312 | 97516660 | CM 5-13- |
| CM 10-2-G | 1.30 / 90 | 1,792 | 96943217 | |
| CM 10-3-G | 1.90 / 90 | 2,197 | 96943250 | CM 10-1- |
| | =:00,00 | | | CM 10-2- |
| CM 15-1-G | 1.30 / 90 | 2,385 | 97516661 | CM 10-3- |
| CM 15-2-G | 1.70 / 90 | 2,715 | 97516662 | CM 10-4- |
| | -, | , | | CM 10-5- |
| CM 25-1-G | 1.70 / 90 | 2,562 | 97516666 | CM 10-6- |
| | 3 / 30 | -, - | 3.323000 | CM 10-7- |
| ELECTRIC MOT | OR | | | CM 10-8- |
| 380-415V 3ph | | | | CIVI 10 0 |
| 220-240V 1ph | | | | CM 15-1- |
| J Pill . | | | | U 10 1 |

220-240V 1ph 50Hz IP55 Class F insulation

PIPE CONNECTIONS

CM 1 & CM3 - Both 1"BSPF CM 5 - Suction 11/4"BSPF Discharge 1"BSPF CM 10 - Both 11/2"BSPF CM 15 & CM25 - Both 2"BSPF

SEAL MATERIALS

AQQE seal has SiC SiC seal faces and EPDM elastomer

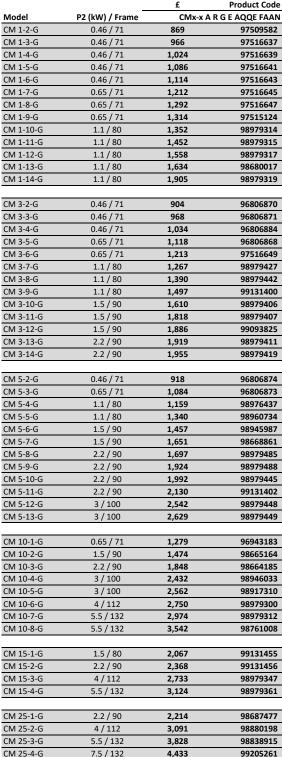
PUMP MATERIALS

CM x - x G pumps are 316 stainless steel (EN1.4401)

Pumps with Custom Built options such as alternative seals, alternative materials different voltage ranges etc can be configured and priced on request by your Sales Office. Flange adaptors, PJE and Tri-Clamp connectors are available on request.

ADAPTOR BASEPLATES

For assisting with the replacement of CH, CHN and CHI units with motor frame size 71/80 only - see page 53.



400V 3ph 50Hz



CATEGORY 2 CME - I 304 STAINLESS STEEL HORIZONTAL MULTISTAGE PUMPS 50/60Hz

COMPLETE WITH VARIABLE SPEED 3500 RPM ELECTRIC MOTOR

| | | _ | 200-240V 1ph 50/60Hz | |
|------------|------------|------------|----------------------|-----------------|
| | Motor | | £ | Product Code |
| Model | Frame size | Transducer | СМх-х А | R I E AQQE UADN |
| CME 1-2-I | 71 | 0 - 4 bar | 1,459 | 98394750 |
| CME 1-3-I | 71 | 0 - 6 bar | 1,500 | 98394760 |
| CME 1-4-I | 71 | 0 - 6 bar | 1,556 | 98394770 |
| CME 1-5-I | 80 | 0 - 10 bar | 1,637 | 98394937 |
| CME 1-6-I | 80 | 0 - 10 bar | 1,712 | 98394957 |
| CME 1-7-I | 80 | 0 - 10 bar | 1,769 | 98394963 |
| CME 1-8-I | 80 | 0 - 16 bar | 1,853 | 98394967 |
| | | | | |
| CME 3-2-I | 71 | 0 - 4 bar | 1,459 | 98394780 |
| CME 3-3-I | 80 | 0 - 6 bar | 1,575 | 98394972 |
| CME 3-4-I | 80 | 0 - 10 bar | 1,632 | 98394981 |
| CME 3-5-I | 80 | 0 - 10 bar | 1,727 | 98394993 |
| CME 3-6-I | 90 | 0 - 10 bar | 2,017 | 98395306 |
| CME 3-7-I | 90 | 0 - 10 bar | 2,140 | 98395316 |
| | | | | |
| CME 5-2-I | 80 | 0 - 4 bar | 1,554 | 98395001 |
| CME 5-3-I | 80 | 0 - 6 bar | 1,626 | 98395013 |
| CME 5-4-I | 90 | 0 - 6 bar | 2,094 | 98395326 |
| | | | • | |
| CME 10-1-I | 80 | 0 - 4 bar | 1,880 | 98394930 |

ELECTRIC MOTOR

380-500V 3ph 50/60Hz with IE5 efficiency 200-240V 1ph 50/60Hz with IE5 efficiency IP55 Class F insulation

PUMP MATERIALS

CM x - x I pumps are 304St Steel (EN1.4301)

SEAL MATERIALS

AQQE seal has SiC SiC seal faces and EPDM elastomer

PIPE CONNECTIONS

CM 1 & CM3 - Both 1"BSPF CM 5 - Suction 1"1/4BSPF Discharge 1"BSPF CM 10 - Both 1"1/2BSPF CM 15 & CM25 - Both 2"BSPF

CME OPERATION

These pump models have been designed for operation in either open or closed loop control arrangements. The default control mode is "Constant Curve/Uncontrolled". For closed loop control either differential pressure transducers, pressure transducers or temperature transducers can be supplied as separate items; as required.

A pressure vessel must be fitted on the discharge pipe close to the pressure sensor and a non-return valve should be fitted to the pump suction, on all CRIE pumps where the "stop" function is activated.

Pumps with Custom Built options such as special seals and non standard configurations can be configured and priced on request by your Sales Office.

IMPORTANT

A Grundfos GO based communication device will be required in order to commission the "E" product. See page 22 for details. This device can be used to commission and monitor multiple pumps on multiple sites.

ADAPTOR BASEPLATES

For assisting with the replacement of CH, CHN and CHI units with motor frame size 71/80 only - see page 53.

Pumps with Custom Built options such as alternative seals, alternative materials different voltage ranges etc can be configured and priced on request by your Sales Office. Flange adaptors, PJE and Tri-Clamp connectors are available on request.





380-500V 3ph 50/60Hz

1,703

1.744

1,800

1,940

2.017

2,073

2,157

2.394

1,703

1.879

1,935

2,029

2.263

2,386

2,800

2.844

1,857

1.930

2,340

2,777

2.853

3,186

3,452

2,183

2,808

3.867

4,398

4,533

3,158

4,205

5.319

3,976

5,773

CMx-x A R I E AQQE SADN

Product Code

98394849

98394859

98394868

98395119

98395127

98395143 98395148

98395354

98394877

98395157

98395166

98395177

98395359

98395366

98396708

98396713

98395195

98395207

98395373

98396719

98396729

99077754

99073792

98395109

98396267

99077759

99077760

99073816

98396593

99077762

99077764

99077766

99077768

Motor

Frame size

71

71

80

80

80

80

90

71

80

80

80

90

90

90

90

80

80

90

90

90

100

100

80

90

112

132

132

90

112

132

100

132

Transducer

0 - 4 bar

0 - 6 bar

0 - 6 bar

0 - 10 bar

0 - 10 bar

0 - 10 bar

0 - 16 bar

0 - 16 bar

0 - 6 bar

0 - 6 bar

0 - 10 bar

0 - 10 bar

0 - 10 har

0 - 16 bar

0 - 16 bar

0 - 16 bar

0 - 4 bar

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0 - 16 bar

0 - 4 bar

0 - 6 bar

0 - 10 bar

0 - 16 bar

0 - 16 bar

0 - 4 bar

0 - 6 bar

0 - 10 har

0 - 4 bar

0 - 6 bar

Model

CME 1-2-I

CME 1-3-I

CME 1-4-I

CME 1-5-I

CME 1-6-I

CME 1-7-I

CME 1-8-I

CME 1-9-I

CME 3-2-I

CME 3-3-I

CME 3-4-I

CME 3-5-I

CMF 3-6-I

CME 3-7-I

CME 3-8-I

CME 3-9-I

CME 5-2-I

CME 5-3-I

CME 5-4-I

CME 5-5-I

CME 5-6-I

CME 5-7-I

CME 5-8-I

CME 10-1-I

CME 10-2-I

CME 10-3-I

CME 10-4-I

CME 10-5-I

CME 15-1-I

CME 15-2-I

CMF 15-3-I

CME 25-1-I

CME 25-2-I

CATEGORY 2 CME - G 316 STAINLESS STEEL HORIZONTAL MULTISTAGE PUMPS 50/60Hz

COMPLETE WITH VARIABLE SPEED 3500 RPM ELECTRIC MOTOR

| | | _ | 200-240V | 1ph 50/60Hz |
|------------|------------|------------|-----------|---------------|
| | Motor | | £ | Product Code |
| Model | Frame size | Transducer | CMx-x A R | G E AQQE UADN |
| CME 1-2-G | 71 | 0 - 4 bar | 1,637 | 98394748 |
| CME 1-3-G | 71 | 0 - 6 bar | 1,723 | 98394758 |
| CME 1-4-G | 71 | 0 - 6 bar | 1,798 | 98394768 |
| CME 1-5-G | 80 | 0 - 10 bar | 1,883 | 98394935 |
| CME 1-6-G | 80 | 0 - 10 bar | 1,920 | 98394954 |
| CME 1-7-G | 80 | 0 - 10 bar | 1,990 | 98394960 |
| CME 1-8-G | 80 | 0 - 16 bar | 2,112 | 98394965 |
| CME 1-9 G | 90 | 0 - 16 bar | 2,417 | 98395299 |
| | | | | |
| CME 3-2-G | 71 | 0 - 4 bar | 1,668 | 98394777 |
| CME 3-3-G | 80 | 0 - 6 bar | 1,784 | 98394970 |
| CME 3-4-G | 80 | 0 - 10 bar | 1,841 | 98394979 |
| CME 3-5-G | 80 | 0 - 10 bar | 1,949 | 98394989 |
| CME 3-6-G | 90 | 0 - 10 bar | 2,249 | 98395303 |
| CME 3-7-G | 90 | 0 - 10 bar | 2,457 | 98395313 |
| | | | | |
| CME 5-2-G | 80 | 0 - 4 bar | 1,784 | 98395003 |
| CME 5-3-G | 80 | 0 - 6 bar | 1,878 | 98395009 |
| CME 5-4-G | 90 | 0 - 6 bar | 2,346 | 98395328 |
| | | | | <u>.</u> |
| CME 10-1-G | 80 | 0 - 4 bar | 2,147 | 98394932 |
| | | | | |

ELECTRIC MOTOR

380-500V 3ph 50/60Hz with IE5 efficiency 200-240V 1ph 50/60Hz with IE5 efficiency IP55 Class F insulation

PUMP MATERIALS

CM x - x G pumps are 316 St Steel (EN1.4401)

SEAL MATERIALS

AQQE seal has Sic Sic seal faces and EPDM elastomer

PIPE CONNECTIONS

CM 1 & CM3 - Both 1"BSPF CM 5 - Suction 11/4"BSPF Discharge 1"BSPF CM 10 - Both 11/2"BSPF

CM 15 & CM25 - Both 2"BSPF

| Model | Frame size | Transducer | CMx-x A R | G E AQQE SADN |
|------------|------------|------------|-----------|---------------|
| CME 1-2-G | 71 | 0 - 4 bar | 1,847 | 98394846 |
| CME 1-3-G | 71 | 0 - 6 bar | 1,931 | 98394855 |
| CME 1-4-G | 71 | 0 - 6 bar | 2,005 | 98394864 |
| CME 1-5-G | 80 | 0 - 10 bar | 2,148 | 98395116 |
| CME 1-6-G | 80 | 0 - 10 bar | 2,184 | 98395124 |
| CME 1-7-G | 80 | 0 - 10 bar | 2,254 | 98395130 |
| CME 1-8-G | 80 | 0 - 16 bar | 2,373 | 98395145 |
| CME 1-9-G | 90 | 0 - 16 bar | 2,614 | 98395352 |
| | | | | |
| CME 3-2-G | 71 | 0 - 6 bar | 1,878 | 98394873 |
| CME 3-3-G | 80 | 0 - 6 bar | 2,051 | 98395153 |
| CME 3-4-G | 80 | 0 - 10 bar | 2,107 | 98395162 |
| CME 3-5-G | 80 | 0 - 10 bar | 2,213 | 98395172 |
| CME 3-6-G | 90 | 0 - 10 bar | 2,450 | 98395356 |
| CME 3-7-G | 90 | 0 - 16 bar | 2,653 | 98395362 |
| CME 3-8-G | 90 | 0 - 16 bar | 3,094 | 98396705 |
| CME 3-9-G | 90 | 0 - 16 bar | 3,150 | 98396709 |
| | | | | |
| CME 5-2-G | 80 | 0 - 4 bar | 2,051 | 98395197 |
| CME 5-3-G | 80 | 0 - 6 bar | 2,142 | 98395201 |
| CME 5-4-G | 90 | 0 - 10 bar | 2,544 | 98395375 |
| CME 5-5-G | 90 | 0 - 10 bar | 3,027 | 98396721 |
| CME 5-6-G | 90 | 0 - 10 bar | 3,158 | 98396725 |
| CME 5-7-G | 100 | 0 - 16 bar | 3,520 | 99176057 |
| CME 5-8-G | 100 | 0 - 16 bar | 3,858 | 99176058 |
| | | | | |
| CME 10-1-G | 80 | 0 - 4 bar | 2,408 | 98395111 |
| CME 10-2-G | 90 | 0 - 6 bar | 3,080 | 98396306 |
| CME 10-3-G | 112 | 0 - 10 bar | 4,220 | 99176091 |
| CME 10-4-G | 132 | 0 - 16 bar | 4,843 | 99176092 |
| CME 10-5-G | 132 | 0 - 16 bar | 5,079 | 99176105 |
| | | | | |
| CME 15-1-G | 90 | 0 - 4 bar | 3,460 | 98396678 |
| CME 15-2-G | 112 | 0 - 6 bar | 4,427 | 99176124 |
| CME 15-3-G | 132 | 0 - 10 bar | 5,646 | 99176125 |
| | | | | |
| CME 25-1-G | 100 | 0 - 4 bar | 4,489 | 99176126 |
| CME 25-2-G | 132 | 0 - 6 bar | 6,140 | 99176127 |
| | | | | |

Transducer

Motor

Frame size

Model

380-500V 3ph 50/60Hz

CMx-x A R G F AOOF SADN

Product Code

Pumps with Custom Built options such as alternative seals, alternative materials different voltage ranges etc can be configured and priced on request by your Sales Office. Flange adaptors, PJE and Tri-Clamp connectors are available on request.

IMPORTANT

A Grundfos GO based communication device will be required in order to commission the "E" product. See page 22 for details. This device can be used to commission and monitor multiple pumps on multiple sites.

ADAPTOR BASEPLATES

For assisting with the replacement of CH, CHN and CHI units with motor frame size 71/80 only - see page 53.





CATEGORY 2 CM SP - SELF-PRIMING STAINLESS STEEL HORIZONTAL MULTISTAGE PUMPS

| | | P2 | 220-240 | V 1ph 50Hz | 220-240 | V 1ph 50Hz |
|--------|-------------|------|------------|---------------|------------|---------------|
| Model | Motor/Frame | kW | £ | Product Code | £ | Product Code |
| | | | max suc | tion lift: 4m | max suc | tion lift: 8m |
| | | | CM x-x S R | I E AQQE CAAN | CM x-x O R | I E AQQE CAAN |
| CM 1-3 | MG71A | 0.30 | 831 | 98482156 | not a | ıvailable |
| CM 1-4 | MG71B | 0.50 | 890 | 98482157 | not a | ıvailable |
| CM 1-5 | MG71B | 0.50 | 958 | 98482158 | not a | ıvailable |
| CM 1-6 | MG71B | 0.50 | 968 | 98482159 | not a | ıvailable |
| CM 3-3 | MG71B | 0.50 | 849 | 98482147 | 849 | 98482173 |
| CM 3-4 | MG71B | 0.50 | 903 | 98482148 | 903 | 98482174 |
| CM 3-5 | MG71B | 0.50 | 970 | 98482149 | 970 | 98482175 |
| CM 3-6 | MG80A | 0.67 | 1,080 | 98482150 | 1,080 | 98482176 |
| CM 5-3 | MG71B | 0.50 | 901 | 98482179 | 901 | 98482186 |
| CM 5-4 | MG80A | 0.67 | 1,070 | 98482180 | 1,070 | 98482187 |
| CM 5-5 | MG80B | 0.90 | 1,179 | 98482181 | 1,179 | 98482188 |
| CM 5-6 | MG90SA | 1.30 | 1,533 | 98482182 | 1,533 | 98482189 |
| CM 5-7 | MG90SA | 1.30 | 1,688 | 98482183 | 1,688 | 98482190 |

| CM ACCESSORIES | | | CM/CMB-SP |
|---|-----------|----------|--------------|
| | | £ | Product Code |
| Spring loaded foot valves in Cast iron | 1" BSPF | 112 | 956110 |
| Spring loaded foot valves in Cast iron | 1" ¼ BSPF | 170 | 956112 |
| Cover for CM motors, frame sizes 71 and 80 | | 104 | 97528743 |
| Angled cable gland with O-ring and lock nut | | obsolete | 97842998 |

NOTE - ALL THE ABOVE CM-SP ACCESSORY PRICES ARE CATEGORY 4 ITEMS FOR DISCOUNT PURPOSES

CATEGORY 2 - CME BOOSTERS CMBE VARIABLE SPEED PACKAGE SET 200-240V 1ph 50/60Hz Pump build code Model **Product Code** CMBE 1-44 IUCDDA 1,837 98374679 CMBE 3-93 98374694 IUCDDA 2,430 CMBE 1-99 IUCDDA 98374691 obsolete CMBE 3-30 IUCDDA 1,987 98374692 98374693 CMBE 3-62 LUCDDA 2,208 CMBE 3-93 IUCDDA 2,430 98374694 CMBE 5-31 IUCDDB 2.999 98374695 CMBE 5-62 IUCDDB 3,221 98374696 IUCDDC CMBE 10-54 3,590 98382190

ELECTRIC MOTOR

200-240V 1ph 50/60Hz with IE5 efficiency IP55 Class F insulation

Seal materials

AVBE seal has Ceramic/Carbon seal faces and EPDM elastomers

Pump materials

CMBE pumps are 304 St Steel (EN1.4301)

Pump pipe connections

CMBE 1 & CMBE 3 - Both 1" BSPF
CMBE 5 - Suction 1"1/4 BSPF Discharge 1" BSPF
CMBE 10 - Suction 1"1/2 BSPF Discharge 1"1/2 BSPF
Includes 1.5m cable without plug

Max liquid temperature: 60°C



| PRESSUI | RE MANAGER | | V | VRAS Approved |
|----------------|--|-------------|---------|---------------|
| | | | 1x220-2 | 40V 50/60 Hz |
| Model | | Max current | £ | Product Code |
| PM1 15 | cut in 1.5bar, cut out at no flow. | 6A | 255 | 96848670 |
| PM1 22 | cut in 2.2bar, cut out at no flow. | 6A | 255 | 96848701 |
| PM2 | cut in variable from 1.5 to 5.5bar in steps of 0.5bar, cut out at no flow. | 10A | 294 | 96848738 |

Max liquid temperature: 40°C Max ambient temperature: 50°C





| | | £ | Product Code |
|--|-----------------------|-----|--------------|
| Pressure tank (additional to PM2) | 8 Litre vertical tank | 91 | 96526321 |
| | | | |
| OTHER ACCESSORIES | | £ | Product Code |
| Float level switch | | 137 | GBPS0099 |
| Spring loaded foot valves in Cast iron | 1" BSPF | 112 | 956110 |
| | 1"¼ BSPF | 170 | 956112 |

NOTE - ALL THE ABOVE CM ACCESSORY PRICES ARE CATEGORY 3 ITEMS FOR DISCOUNT PURPOSES

NOTE - ALL THE ABOVE CM ACCESSORY PRICES ARE CATEGORY 4 ITEMS FOR DISCOUNT PURPOSES

ADAPTOR BASEPLATES (For replacement of CH, CHN and CHI units with CM with motor 71/80 Frame size only)

| | £ | Product Code |
|-------------------------|----|---------------------|
| CH(N) 2 to CM 1 or CM 3 | 65 | 96960786 |
| CH(N) 4 to CM 3 or CM 5 | 65 | 96960786 |
| CH 8 to CM 10 | 65 | 96960787 |
| CH 12 to CM 10 or CM 15 | 65 | 96960787 |

| | £ | Product Code |
|-----------------------------------|----|--------------|
| CHI(E) 2 to CM(E) 1 or CM(E) 3 | 65 | 96960788 |
| CHI(E) 4 to CM(E) 3 or CM(E) 5 | 65 | 96960788 |
| CHI(E) 8 to CM(E) 10 | 65 | 96960788 |
| CHI(E) 12 to CM(E) 10 or CM(E) 15 | 65 | 96960788 |

NOTE - THE ABOVE CM ADAPTOR PLATE PRICES ARE CATEGORY 2 ITEMS FOR DISCOUNT PURPOSES

| JUPLED 50H | z 2900RPM ELEC | TRIC MOTOR | | |
|-------------------|---|--|---|--|
| P1 | Pipe outlet | Depth B | | |
| Watts | Connections | (mm) | £ | Product Code |
| | PUMP WITH TOP S | UCTION INLET | | AWA |
| 86 | G 1/2" | 150 | 260 | 9798917 |
| | | | | |
| | PUMP WITH BOTTO | OM SUCTION INLET | | AWAI |
| 86 | G 1/2" | 153 | 260 | 9798918 |
| | | | | |
| | PUMP WITH TOP S | UCTION INLET | | AWA |
| 200 | G 3/4" | 125 | 334 | 9798918 |
| 200 | G 3/4" | 175 | 376 | 9798918 |
| 200 | G 3/4" | 245 | 417 | 9798918 |
| 200 | G 3/4" | 345 | 458 | 9798920 |
| | | | | |
| | PUMP WITH BOTTO | OM SUCTION INLET | | AWA |
| 200 | G 3/4" | 130.5 | 334 | 97989208 |
| 200 | G 3/4" | 180.5 | 376 | 9798922 |
| 200 | G 3/4" | 250.5 | 417 | 9798923 |
| 200 | G 3/4" | 350.5 | 458 | 97989230 |
| | | | | |
| | PUMP WITH TOP SI | UCTION INLET | | AWA |
| 270 | | | 391 | 9798924 |
| | · | | | 97989240 |
| | | | | 9798924 |
| | | | | 97989250 |
| | 22,1 | | | 01000=0 |
| | PUMP WITH BOTTO | OM SUCTION INLET | | AWA |
| 270 | | | 391 | 9798925 |
| | | | | 9798925 |
| | | | | 97989254 |
| | • | | | 9798927 |
| 270 | 0 3/ 4 | 332.3 | 5.10 | 3,3032, |
| | DI IMD WITH TOD SI | ICTION INLET | | AWA |
| 440 | | | 438 | 9798927 |
| | | | | 9798927 |
| | | | | 97989278 |
| | | | | 97989280 |
| 440 | 011/4 | 330 | 024 | 3730320 |
| | DI IMP WITH BOTTO | OM SLICTION INLET | | AWAE |
| 440 | | | 438 | 97989292 |
| | | | | 97989293 |
| | | | | 9798929 |
| | | | | 9798929 |
| 440 | 011/4 | 333 | 024 | 3736323 |
| | DUMD WITH BOTT | NA SUCTION INLET | | AWBI |
| 700 | | | 939 | 9798929 |
| | | | | |
| | | | | 97989299 |
| 790 | G 1 1/2 | 350 | 1,048 | 9798930 |
| | DUBAR MUTU TOO O | ICTION INIT | | |
| | | | | A W B |
| ^- | | | | |
| 95 | G 1/2" | 150 | 334 | |
| 95 230 281 | G 1/2" G 3/4" G 3/4" | 150 180 250 | 334 437 499 | 9798930 9798930 9798930 |
| | P1 Watts 86 86 200 200 200 200 200 200 200 200 200 | P1 Pipe outlet Watts Connections PUMP WITH TOP SI 86 G 1/2" PUMP WITH BOTTO 86 G 1/2" PUMP WITH TOP SI 200 G 3/4" 270 G 3/4" 2 | ### PUMP WITH TOP SUCTION INLET ### 86 | P1 Watts Connections (mm) £ PUMP WITH TOP SUCTION INLET 86 G 1/2" 150 260 PUMP WITH BOTTOM SUCTION INLET 86 G 1/2" 153 260 PUMP WITH TOP SUCTION INLET 200 G 3/4" 125 334 200 G 3/4" 175 376 200 G 3/4" 245 417 200 G 3/4" 345 458 PUMP WITH BOTTOM SUCTION INLET 200 G 3/4" 130.5 334 200 G 3/4" 130.5 334 200 G 3/4" 130.5 3376 200 G 3/4" 150.5 376 200 G 3/4" 180.5 376 200 G 3/4" 180.5 376 200 G 3/4" 250.5 417 200 G 3/4" 350.5 458 PUMP WITH TOP SUCTION INLET 270 G 3/4" 128 391 270 G 3/4" 348 540 PUMP WITH BOTTOM SUCTION INLET 270 G 3/4" 348 490 270 G 3/4" 348 540 PUMP WITH BOTTOM SUCTION INLET 270 G 3/4" 182.5 391 270 G 3/4" 348 540 PUMP WITH BOTTOM SUCTION INLET 270 G 3/4" 132.5 391 270 G 3/4" 135.5 391 2 |

ELECTRIC MOTOR (Dual voltage/Dual frequency) 220-240/380-415V 3ph 50Hz

220-240/380-440V 3ph 60Hz IP54 Class F insulation

All motors 750W and above are IE3 Efficiency.



CATEGORY 2 - SPK and MTH FLANGED MOUNTED IMMERSIBLE PUMPS

COMPLETE WITH DIRECT COUPLED 2900 RPM ELECTRIC IE3 MOTOR (0.75kW AND ABOVE)

| | | | | 400V 3p | h 50Hz |
|------------|------|--------------------|---------|---------|--------------|
| | P2 | Pipe | Depth B | £ | Product Code |
| Model | kW | connections | (mm) | AWA | AUUV |
| SPK1-1/1 | 0.06 | G 3/4" (3/4" BSPF) | 140 | 649 | 39AH5001 |
| SPK1-3/3 | 0.12 | G 3/4" (3/4" BSPF) | 182 | 722 | 39AH5103 |
| SPK1-5/5 | 0.12 | G 3/4" (3/4" BSPF) | 224 | 812 | 39AH5205 |
| SPK1-8/8 | 0.18 | G 3/4" (3/4" BSPF) | 287 | 1,018 | 39AH5308 |
| SPK1-11/11 | 0.25 | G 3/4" (3/4" BSPF) | 350 | 1,133 | 39AH0411 |
| SPK1-15/15 | 0.37 | G 3/4" (3/4" BSPF) | 434 | 1,292 | 39AH0515 |
| SPK1-19/19 | 0.37 | G 3/4" (3/4" BSPF) | 518 | 1,375 | 39AH0619 |
| SPK1-23/23 | 0.55 | G 3/4" (3/4" BSPF) | 602 | 1,613 | 39AH0723 |
| | | | | | |
| SPK2-1/1 | 0.06 | G 3/4" (3/4" BSPF) | 140 | 648 | 39DH5001 |
| SPK2-3/3 | 0.12 | G 3/4" (3/4" BSPF) | 182 | 803 | 39DH5103 |
| SPK2-5/5 | 0.18 | G 3/4" (3/4" BSPF) | 224 | 874 | 39DH5205 |
| SPK2-8/8 | 0.37 | G 3/4" (3/4" BSPF) | 287 | 1,040 | 39DH0308 |
| SPK2-11/11 | 0.37 | G 3/4" (3/4" BSPF) | 350 | 1,130 | 39DH0411 |
| SPK2-15/15 | 0.55 | G 3/4" (3/4" BSPF) | 434 | 1,288 | 39DH0515 |
| SPK2-19/19 | 0.75 | G 3/4" (3/4" BSPF) | 518 | 1,370 | 98776571 |
| SPK2-23/23 | 0.75 | G 3/4" (3/4" BSPF) | 602 | 1,607 | 98776573 |
| | | | | | |
| SPK4-1/1 | 0.25 | G 3/4" (3/4" BSPF) | 140 | 701 | 39GH0001 |
| SPK4-3/3 | 0.25 | G 3/4" (3/4" BSPF) | 182 | 798 | 39GH0103 |
| SPK4-5/5 | 0.37 | G 3/4" (3/4" BSPF) | 224 | 915 | 39GH0205 |
| SPK4-8/8 | 0.55 | G 3/4" (3/4" BSPF) | 287 | 1,076 | 39GH0308 |
| SPK4-11/11 | 0.75 | G 3/4" (3/4" BSPF) | 350 | 1,248 | 98776576 |
| SPK4-15/15 | 1.1 | G 3/4" (3/4" BSPF) | 434 | 1,530 | 98776578 |
| SPK4-19/19 | 1.1 | G 3/4" (3/4" BSPF) | 518 | 1,674 | 98776582 |
| | | | | | |

ELECTRIC MOTOR

380-415V 3ph 50Hz

IP55 Class F insulation

All 3 Phase motors 0.75kW and above are IE3 Efficiency.

| COMPLETE WITH DIR | ECT COUPLED 2900 | RPIM ELECTRIC IES | MOTOR (0.75kW AND | | |
|-------------------|------------------|-------------------|-------------------|--------|--------------|
| | | | | 400V 3 | 3ph 50Hz |
| | P2 | Pipe | Depth B | £ | Product Code |
| Model | kW | connections | (mm) | AWA | A AQQV |
| MTH 2-3/3 | 0.55 | Rp 3/4" | 145 | 939 | 98992572 |
| MTH 2-4/4 | 0.75 | Rp 3/4" | 163 | 961 | 98992589 |
| MTH 2-5/5 | 0.75 | Rp 3/4" | 181 | 984 | 98992605 |
| MTH 2-6/6 | 1.1 | Rp 3/4" | 199 | 1,011 | 98992621 |
| MTH 2-7/7 | 1.1 | Rp 3/4" | 217 | 1,078 | 98992633 |
| MTH 2-8/8 | 1.1 | Rp 3/4" | 235 | 1,101 | 98992642 |
| MTH 2-9/9 | 1.1 | Rp 3/4" | 253 | 1,123 | 98992649 |
| MTH 2-10/10 | 1.1 | Rp 3/4" | 271 | 1,147 | 98992652 |
| MTH 2-11/11 | 1.1 | Rp 3/4" | 289 | 1,173 | 98992654 |
| MTH 4-2/1 | 0.55 | Rp 3/4" | 145 | 941 | 98993021 |
| MTH 4-2/2 | 0.55 | Rp 3/4" | 145 | 963 | 98993029 |
| MTH 4-3/3 | 0.75 | Rp 3/4" | 172 | 987 | 98993037 |
| MTH 4-4/4 | 1.1 | Rp 3/4" | 199 | 1,013 | 98993044 |
| MTH 4-5/5 | 1.1 | Rp 3/4" | 226 | 1,035 | 98993050 |
| MTH 4-6/6 | 1.1 | Rp 3/4" | 253 | 1,059 | 98993060 |
| MTH 4-7/7 | 1.5 | Rp 3/4" | 280 | 1,506 | 98993068 |
| MTH 4-8/8 | 1.5 | Rp 3/4" | 307 | 1,552 | 98993074 |

ELECTRIC MOTOR

380-415V 3ph 50Hz

IP54 Class F insulation

All 3 Phase motors 0.75kW and above are IE3 Efficiency.

Dummy stages

All pumps listed are fully staged where the number of impellers equals the number of stages.

If dummy stages are required please contacts the Sales Office where these variants can be configured and priced.



CATEGORY 2 - MTR 1s to MTR 3 CAST IRON/304 STAINLESS STEEL IMMERSIBLE PUMPS

COMPLETE WITH DIRECT COUPLED 2900 RPM ELECTRIC IE3 MOTOR (0.75kW AND ABOVE)

| | | _ | 400V 3 | ph 50Hz |
|------------------------------|--------------|------------|----------------|----------------------|
| | P2 | Depth B | £ | Product Code |
| Model | kW | (mm) | | HUUV |
| MTR 1s-2/2 | 0.37 | 160 | 1,179 | 96514842 |
| MTR 1s-3/3 | 0.37 | 178 | 1,197 | 96514843 |
| MTR 1s-4/4 MTR 1s-5/5 | 0.37 | 196 214 | 1,215 1,231 | 96514844 96514845 |
| MTR 1s-6/6 | 0.37 | 232 | 1,253 | 96514846 |
| MTR 1s-7/7 | 0.37 | 250 | 1,265 | 96514847 |
| MTR 1s-8/8 | 0.37 | 268 | 1,287 | 96514848 |
| MTR 1s-9/9 | 0.37 | 286 | 1,300 | 96514849 |
| MTR 1s-10/10 | 0.37 | 304 | 1,321 | 96514850 |
| MTR 1s-11/11 | 0.37 | 322 | 1,337 | 96514851 |
| MTR 1s-12/12 | 0.37 | 340 | 1,355 | 96514853 |
| MTR 1s-13/13 | 0.55 | 358 | 1,367 | 96514854 |
| MTR 1s-15/15 | 0.55 | 394 | 1,433 | 96514855 |
| MTR 1s-17/17 | 0.55 | 430 | 1,469 | 96514857 |
| MTR 1s-19/19 | 0.55 | 466 | 1,504 | 96514858 |
| MTR 1s-21/21 MTR 1s-22/22 | 0.75 | 502 520 | 1,598 1,614 | 98406764 98511194 |
| MTR 1s-23/23 | 0.75 | 538 | 1,632 | 98511195 |
| MTR 1s-25/25 | 0.75 | 574 | 1,667 | 98511196 |
| MTR 1s-26/26 | 1.1 | 592 | 1,678 | 98511197 |
| MTR 1s-27/27 | 1.1 | 610 | 1,746 | 98511198 |
| MTR 1s-30/30 | 1.1 | 664 | 1,813 | 98511200 |
| MTR 1s-33/33 | 1.1 | 718 | 1,849 | 98511251 |
| MTR 1s-36/36 | 1.1 | 772 | 1,902 | 98511252 |
| | | | | |
| MTR 1-2/2 | 0.37 | 160 | 1,264 | 96514868 |
| MTR 1-3/3 | 0.37 | 178 | 1,279 | 96514869 |
| MTR 1-4/4 | 0.37 | 196 | 1,292 | 96514870 |
| MTR 1-5/5 | 0.37 | 214 | 1,301 | 96514871 |
| MTR 1-6/6 MTR 1-7/7 | 0.37 | 232 250 | 1,312 1,322 | 96514872 96514873 |
| MTR 1-8/8 | 0.55 | 268 | 1,349 | 96514874 |
| MTR 1-9/9 | 0.55 | 286 | 1,374 | 96514875 |
| MTR 1-10/10 | 0.55 | 304 | 1,382 | 96514876 |
| MTR 1-11/11 | 0.55 | 322 | 1,392 | 96514877 |
| MTR 1-12/12 | 0.75 | 340 | 1,433 | 98511253 |
| MTR 1-13/13 | 0.75 | 358 | 1,449 | 98511254 |
| MTR 1-15/15 | 0.75 | 394 | 1,474 | 98511255 |
| MTR 1-17/17 | 1.1 | 430 | 1,579 | 98511256 |
| MTR 1-19/19 | 1.1 | 466 | 1,597 | 98511257 |
| MTR 1-21/21 | 1.1 | 502 | 1,621 | 98511258 |
| MTR 1-22/22 | 1.1 | 520 | 1,631 | 98511259 |
| MTR 1-23/23 MTR 1-25/25 | 1.5 | 538 574 | 1,645 2,078 | 98511260 98511261 |
| MTR 1-26/26 | 1.5 | 592 | 2,093 | 98511262 |
| MTR 1-27/27 | 1.5 | 610 | 2,102 | 98511263 |
| MTR 1-30/30 | 1.5 | 664 | 2,157 | 98511264 |
| MTR 1-33/33 | 2.2 | 718 | 2,395 | 98513535 |
| MTR 1-36/36 | 2.2 | 772 | 2,428 | 98492759 |
| | | | | |
| MTR 3-2/2 | 0.37 | 160 | 1,251 | 96514893 |
| MTR 3-3/3 | 0.37 | 178 | 1,260 | 96514894 |
| MTR 3-4/4 | 0.37 | 196 | 1,275 | 96514895 |
| MTR 3-5/5 | 0.37 | 214 | 1,285 | 96514896 |
| MTR 3-6/6 MTR 3-7/7 | 0.55 | 232 250 | 1,326 | 96514897 96514898 |
| MTR 3-8/8 | 0.55 0.75 | 268 | 1,342 1,378 | 98511266 |
| MTR 3-9/9 | 0.75 | 286 | 1,397 | 98511267 |
| MTR 3-10/10 | 0.75 | 304 | 1,411 | 98511268 |
| MTR 3-11/11 | 0.75 | 322 | 1,419 | 98511269 |
| MTR 3-12/12 | 1.1 | 340 | 1,550 | 98511270 |
| MTR 3-13/13 | 1.1 | 358 | 1,561 | 98511271 |
| MTR 3-15/15 | 1.1 | 394 | 1,585 | 98511272 |
| MTR 3-17/17 | 1.5 | 430 | 2,052 | 97946744 |
| MTR 3-19/19 | 1.5 | 466 | 2,076 | 98494988 |
| MTR 3-21/21 | 2.2 | 502 | 2,240 | 98511273 |
| MTR 3-22/22 | 2.2 | 520 | 2,249 | 98511274 |
| MTR 3-23/23 | 2.2 | 538 | 2,264 | 98511275 |
| MTR 3-25/25 | 2.2 | 574 | 2,286 | 98511276 |
| MTR 3-26/26 MTR 3-27/27 | 2.2 | 592 610 | 2,298 | 98509384 |
| MTR 3-30/30 | 2.2 | 664 | 2,311 2,461 | 98494192 98511281 |
| MTR 3-33/33 | 3 | 718 | 2,510 | 98511281 |
| MTR 3-36/36 | 3 | 772 | 2,543 | 98511283 |
| | | | , . | |

Pipe Connections

MTR 1s, 1 & 3: G1"1/4 (1"1/4 BSPF)

ELECTRIC MOTOR

380-415V 3ph 50Hz IP55 Class F insulation All 3 Phase motors 0.75kW and above are IE3 Efficiency.

Please see page 60 for motor retrofit details.

Dummy stages

All pumps listed are fully staged where the number of impellers equals the number of stages If dummy stages are required please contact the Sales Office where these variants can be configured and priced.

Frequency and voltages

If 60Hz or non standard voltages are required these pumps can be sized and configured by the Sales Offices.



CATEGORY 2 - MTR 5 to MTR 10 CAST IRON/304 STAINLESS STEEL IMMERSIBLE PUMPS

COMPLETE WITH DIRECT COUPLED 2900 RPM ELECTRIC IE3 MOTOR (0.75kW AND ABOVE)

| | | | 400V 3p | h 50Hz |
|------------------------------|------|------------|----------------|----------------------|
| | P2 | Depth B | £ | Product Code |
| Model | kW | (mm) | AWA | |
| MTR 5-2/2 MTR 5-3/3 | 0.37 | 169 196 | 1,221 1,267 | 96514917 96514918 |
| MTR 5-4/4 | 0.55 | 223 | 1,283 | 96514919 |
| MTR 5-5/5 | 0.75 | 250 | 1,345 | 98511284 |
| MTR 5-6/6 | 1.1 | 277 | 1,469 | 98511286 |
| MTR 5-7/7 | 1.1 | 304 | 1,484 | 98096418 |
| MTR 5-8/8 | 1.1 | 331 | 1,503 | 98511287 |
| MTR 5-9/9 | 1.5 | 358 | 1,952 | 97938362 |
| MTR 5-10/10 | 1.5 | 385 | 1,972 | 98511288 |
| MTR 5-12/12 | 2.2 | 439 | 2,106 | 98330756 |
| MTR 5-14/14 MTR 5-16/16 | 2.2 | 493 547 | 2,136 2,168 | 98513569 |
| MTR 5-17/17 | 3 | 583 | 2,315 | 98513570 98513571 |
| MTR 5-18/18 | 3 | 601 | 2,328 | 98513572 |
| MTR 5-19/19 | 3 | 628 | 2,348 | 98513573 |
| MTR 5-20/20 | 3 | 655 | 2,363 | 98513574 |
| MTR 5-21/21 | 4 | 682 | 2,372 | 98513575 |
| MTR 5-22/22 | 4 | 709 | 2,855 | 98429669 |
| MTR 5-24/24 | 4 | 763 | 2,888 | 98513576 |
| MTR 5-26/26 | 4 | 817 | 2,917 | 98513577 |
| MTR 5-29/29 | 4 | 898 | 2,963 | 98513578 |
| MTR 5-32/32 | 5.5 | 979 | 3,694 | 98513579 |
| MTD 0 1/1 | 0.37 | 106 | 1 001 | 00035613 |
| MTR 8-1/1 MTR 8-2/2-1 | 0.55 | 196 223 | 1,081 | 98825612 98825613 |
| MTR 8-2/2 | 0.75 | 223 | 1,178 | 98825614 |
| MTR 8-3/3-1 | 0.75 | 250 | 1,207 | 98825615 |
| MTR 8-3/3 | 1.1 | 250 | 1,232 | 98825616 |
| MTR 8-4/4-1 | 1.1 | 277 | 1,265 | 98825617 |
| MTR 8-4/4 | 1.5 | 277 | 1,688 | 98825618 |
| MTR 8-5/5-1 | 1.5 | 304 | 1,770 | 98825619 |
| MTR 8-5/5 | 2.2 | 304 | obsolete | 98825696 |
| MTR 8-6/6-1 | 2.2 | 331 | 1,899 | 98825697 |
| MTR 8-6/6 | 2.2 | 331 | 1,951 | 98825698 |
| MTR 8-7/7-1 MTR 8-7/7 | 2.2 | 358 358 | 2,005 | 98825699 98825700 |
| MTR 8-8/8-1 | 3 | 385 | 2,373 | 98825701 |
| MTR 8-8/8 | 3 | 385 | 2,391 | 98825702 |
| MTR 8-9/9-1 | 3 | 412 | 2,409 | 98825703 |
| MTR 8-9/9 | 3 | 412 | 2,427 | 98825704 |
| MTR 8-10/10-1 | 3 | 439 | 2,443 | 98825705 |
| MTR 8-10/10 | 3 | 439 | 2,460 | 98825706 |
| MTR 8-11/11 | 4 | 466 | 2,953 | 98825707 |
| MTR 8-12/12 | 4 | 493 | 2,990 | 98825708 |
| MTR 8-13/13 | 4 | 520 | 3,026 | 98825709 |
| MTR 8-14/14 MTR 8-15/15 | 5.5 | 547 | 3,675 | 98825710 |
| MTR 8-16/16 | 5.5 | 601 | 3,744 | 98825711 98825712 |
| MTR 8-17/17 | 5.5 | 628 | 3,780 | 98825713 |
| MTR 8-18/18 | 5.5 | 655 | 3,832 | 98825714 |
| MTR 8-19/19 | 7.5 | 682 | 3,905 | 98825715 |
| MTR 8-20/20 | 7.5 | 709 | 3,938 | 98825716 |
| MTR 8-21/21 | 7.5 | 736 | 3,974 | 98825717 |
| MTR 8-22/22 | 7.5 | 763 | 4,009 | 98825719 |
| MTR 8-23/23 | 7.5 | 790 | 4,042 | 98825720 |
| MTR 8-24/24 | 7.5 | 817 | 4,079 | 98825721 |
| MTR 8-25/25 | 7.5 | 844 | 4,115 | 98825722 |
| MTR 10-2/1 | 0.75 | 148 | 1,709 | 98511303 |
| MTR 10-2/2 | 0.75 | 148 | 1,764 | 98511304 |
| MTR 10-3/3 | 1.1 | 178 | 1,860 | 98511305 |
| MTR 10-4/4 | 1.5 | 208 | 2,177 | 98511306 |
| MTR 10-5/5 | 2.2 | 238 | 2,307 | 98513584 |
| MTR 10-6/6 | 2.2 | 268 | 2,353 | 98513585 |
| MTR 10-7/7 | 3 | 298 | 2,459 | 98513586 |
| MTR 10-8/8 | 3 | 328 | 2,506 | 98513587 |
| MTR 10-9/9 | 3 | 358 | 2,555 | 98513589 |
| MTR 10-10/10 MTR 10-12/12 | 4 | 388 448 | 3,150 3,247 | 98513590 |
| MTR 10-12/12 MTR 10-14/14 | 5.5 | 508 | 3,247 | 98513591 98513592 |
| MTR 10-16/16 | 5.5 | 568 | 3,922 | 98513594 |
| MTR 10-18/18 | 7.5 | 628 | 4,038 | 98513595 |
| MTR 10-20/20 | 7.5 | 688 | 4,131 | 98513596 |
| MTR 10-22/22 | 7.5 | 748 | 4,227 | 98513597 |
| | | | | |

Pipe Connections

MTR 5 & 8 : G1"1/4 (1"1/4 BSPF) MTR 10: G 2" (2" BSPF)

ELECTRIC MOTOR

380-415V 3ph 50Hz IP55 Class F insulation All 3 Phase motors 0.75kW and above are IE3 Efficiency.

Please see page 60 for motor retrofit details.

Dummy stages

All pumps listed are fully staged where the number of impellers equals the number of stages If dummy stages are required please contact the Sales Office where these variants can be configured and priced.

Frequency and voltages

If 60Hz or non standard voltages are required these pumps can be sized and configured by the Sales Offices.



CATEGORY 2 - MTR 15 to MTR 32 CAST IRON/304 STAINLESS STEEL IMMERSIBLE PUMPS

COMPLETE WITH DIRECT COUPLED 2900 RPM ELECTRIC IE3 MOTOR

| CONTRILL W | ITH DIKECT | COUPLED 2500 | | ILS WOTON |
|---------------|------------|--------------|---------------|--------------|
| | | | 400V 3ph 50Hz | |
| | P2 | Depth B | £ | Product Code |
| Model | kW | (mm) | A W A HUUV | |
| MTR 15-2/1 | 1.1 | 178 | 1,849 | 98407083 |
| MTR 15-2/2 | 2.2 | 178 | 2,114 | 98513599 |
| MTR 15-3/3 | 3 | 223 | 2,348 | 98513600 |
| MTR 15-4/4 | 4 | 268 | 2,769 | 98513601 |
| MTR 15-5/5 | 4 | 313 | 2,839 | 98513602 |
| MTR 15-6/6 | 5.5 | 358 | 3,349 | 98282545 |
| MTR 15-7/7 | 5.5 | 403 | 3,420 | 98513654 |
| MTR 15-8/8 | 7.5 | 448 | 3,684 | 98330630 |
| MTR 15-9/9 | 7.5 | 493 | 3,752 | 98513656 |
| MTR 15-10/10 | 11 | 538 | 5,622 | 98513657 |
| MTR 15-12/12 | 11 | 628 | 5,758 | 98513658 |
| MTR 15-14/14 | 11 | 718 | 5,903 | 98513659 |
| MTR 15-16/16 | 15 | 808 | 7,516 | 98383020 |
| MTR 15-17/17 | 15 | 853 | 7,583 | 98513660 |
| , | | | , | |
| MTR 20 -2/1 | 1.1 | 178 | 2,014 | 98511336 |
| MTR 20 -2/2 | 2.2 | 178 | 2,299 | 98513662 |
| MTR 20 -3/3 | 4 | 223 | 3,089 | 98513663 |
| MTR 20 -4/4 | 5.5 | 268 | 3,656 | 98513664 |
| MTR 20 -5/5 | 5.5 | 313 | 3,723 | 98513666 |
| MTR 20 -6/6 | 7.5 | 358 | 4,014 | 98513667 |
| MTR 20 -7/7 | 7.5 | 403 | 4,088 | 98513668 |
| MTR 20 -8/8 | 11 | 448 | 6,285 | 98513669 |
| MTR 20 -10/10 | 11 | 538 | 6,426 | 98513670 |
| MTR 20 -12/12 | 15 | 628 | 8,118 | 98441644 |
| MTR 20 -14/14 | 15 | 718 | 8,256 | 98513671 |
| MTR 20 -16/16 | 18.5 | 808 | 9,570 | 98513672 |
| MTR 20 -17/17 | 18.5 | 853 | 9,708 | 98513673 |
| | | | , , | |
| MTR 32-2/1-1 | 1.5 | 223 | 2,672 | 98511349 |
| MTR 32-2/1 | 2.2 | 223 | Obsolete | 98513676 |
| MTR 32-2/2-2 | 3 | 223 | 3,161 | 98513677 |
| MTR 32-2/2 | 4 | 223 | 3,718 | 98513678 |
| MTR 32-3/3 | 5.5 | 293 | 4,807 | 98446579 |
| MTR 32-4/4 | 7.5 | 363 | 5,987 | 98349230 |
| MTR 32-5/5 | 11 | 433 | 7,649 | 98513679 |
| MTR 32-6/6 | 11 | 503 | 8,069 | 98349249 |
| MTR 32-7/7 | 15 | 573 | 9,495 | 98513680 |
| MTR 32-8/8 | 15 | 643 | 9,911 | 98513681 |
| MTR 32-9/9 | 18.5 | 713 | 11,253 | 98381028 |
| MTR 32-10/10 | 18.5 | 783 | 11,669 | 98513682 |
| MTR 32-11/11 | 22 | 853 | 13,094 | 98513683 |
| MTR 32-12/12 | 22 | 923 | 13,511 | 98395376 |
| MTR 32-13/13 | 30 | 993 | 16,358 | 98513685 |
| MTR 32-14/14 | 30 | 1063 | 16,771 | 98513686 |
| WITH 32 14/14 | 30 | 1003 | 10,771 | 30313000 |

Pipe Connections

MTR15 & 20: G 2" (2" BSPF) MTR 32: DN65 Flanged

ELECTRIC MOTOR

380-415V 3ph 50Hz IP55 Class F insulation All 3 Phase motors 0.75kW and above are IE3 Efficiency.

Please see page 60 for motor retrofit details.

Dummy stages

All pumps listed are fully staged where the number of impellers equals the number of stages If dummy stages are required please contact the Sales Office where these variants can be configured and priced.

Frequency and voltages

If 60Hz or non standard voltages are required these pumps can be sized and configured by the Sales Offices.



CATEGORY 2 - MTR 45 to MTR 64 CAST IRON/304 STAINLESS STEEL IMMERSIBLE PUMPS

COMPLETE WITH DIRECT COUPLED 2900 RPM ELECTRIC IE3 MOTOR

| COIVII ELIE VVII | III DINLECT C | OUPLED 2900 R | | ph 50Hz |
|------------------|---------------|---------------|---------|--------------|
| | P2 | Depth B | £ | Product Code |
| Model | kW | (mm) | | HUUV |
| MTR 45-2/1-1 | 3 | 244 | 3,260 | 98513687 |
| MTR 45-2/1 | 4 | 244 | 3,542 | 98513688 |
| MTR 45-2/2-2 | 5.5 | 244 | 4,623 | 98513697 |
| MTR 45-2/2 | 7.5 | 244 | 5,781 | 98513698 |
| MTR 45-3/3-2 | 11 | 324 | 7,681 | 98513699 |
| MTR 45-3/3 | 11 | 324 | 7,681 | 98513700 |
| MTR 45-4/4-2 | 15 | 404 | 9,537 | 98513701 |
| MTR 45-4/4 | 15 | 404 | 9,537 | 98513702 |
| MTR 45-5/5-2 | 18.5 | 484 | | |
| , - | | 484 | 11,350 | 98513704 |
| MTR 45-5/5 | 18.5 | | 11,350 | 98513705 |
| MTR 45-6/6-2 | 22 | 564 | 12,877 | 98513706 |
| MTR 45-6/6 | 22 | 564 | 12,877 | 98513707 |
| MTR 45-7/7-2 | 30 | 644 | 14,040 | 98513708 |
| MTR 45-7/7 | 30 | 644 | 14,040 | 98513709 |
| MTR 45-8/8-2 | 30 | 724 | 14,956 | 98513710 |
| MTR 45-8/8 | 30 | 724 | 14,956 | 98513711 |
| MTR 45-9/9-2 | 30 | 804 | 15,428 | 98513712 |
| MTR 45-9/9 | 37 | 804 | 16,813 | 98513713 |
| MTR 45-10/10-2 | 37 | 884 | 17,235 | 98513714 |
| MTR 45-10/10 | 37 | 884 | 17,235 | 98513715 |
| MTR 45-11/11-2 | 45 | 964 | 22,248 | 98513716 |
| MTR 45-11/11 | 45 | 964 | 22,248 | 98513717 |
| MTR 45-12/12-2 | 45 | 1044 | 22,773 | 98513718 |
| MTR 45-12/12 | 45 | 1044 | 22,773 | 98513719 |
| MTR 45-13/13-2 | 45 | 1124 | 23,299 | 98513720 |
| | | | | |
| MTR 64-2/1-1 | 4 | 249 | 3,526 | 98513732 |
| MTR 64-2/1 | 5.5 | 249 | 4,378 | 98513733 |
| MTR 64-2/2-2 | 7.5 | 249 | 5,596 | 98513735 |
| MTR 64-2/2-1 | 11 | 249 | 6,926 | 98513736 |
| MTR 64-2/2 | 11 | 249 | 7,320 | 98513737 |
| MTR 64-3/3-2 | 15 | 332 | 9,196 | 98513738 |
| MTR 64-3/3-1 | 15 | 332 | 9,196 | 98513739 |
| MTR 64-3/3 | 18.5 | 332 | 10,571 | 98513740 |
| MTR 64-4/4-2 | 18.5 | 414 | 11,096 | 98513742 |
| MTR 64-4/4-1 | 22 | 414 | 12,291 | 98513743 |
| MTR 64-4/4 | 22 | 414 | 12,291 | 98513744 |
| MTR 64-5/5-2 | 30 | 497 | 13,113 | 98513745 |
| MTR 64-5/5-1 | 30 | 497 | 13,113 | 98513746 |
| MTR 64-5/5 | 30 | 497 | 13,113 | 98513747 |
| MTR 64-6/6-2 | 30 | 579 | 13,644 | 98513748 |
| MTR 64-6/6-1 | 37 | 579 | 16,161 | 98513749 |
| MTR 64-6/6 | 37 | 579 | 16,161 | 98513750 |
| MTR 64-7/7-2 | 37 | 662 | 16,686 | 98513752 |
| MTR 64-7/7-1 | 37 | 662 | 16,686 | 98513753 |
| MTR 64-7/7 | 45 | 662 | 22,206 | 98513754 |
| MTR 64-8/8-2 | 45 | 744 | 22,729 | 98513755 |
| MTR 64-8/8-1 | 45 | 744 | 22,729 | 98513756 |
| WITH 07 0/0-1 | 73 | , 44 | LL,1 L3 | 30313730 |

Pipe Connections

MTR 45 & 64: DN80 Flanged

ELECTRIC MOTOR

380-415V 3ph 50Hz IP55 Class F insulation All 3 Phase motors 3.0kW and above are IE3 Efficiency.

Please see page 60 for motor retrofit details.

Dummy stages

All pumps listed are fully staged where the number of impellers equals the number of stages If dummy stages are required please contact the Sales Office where these variants can be configured and priced.

Frequency and voltages

If 60Hz or non standard voltages are required these pumps can be sized and configured by the Sales Offices.



CATEGORY 2 - MTRE HIGH SPEED FLANGED MOUNTED IMMERSIBLE PUMPS

COMPLETE WITH DIRECT COUPLED MGE VARIABLE SPEED ELECTRIC MOTOR

| | | | | 380-500V | 3pn 50/60Hz |
|---------------|-----|---------|---|----------|--------------|
| | P2 | Depth B | _ | £ | Product Code |
| Model | kW | (mm) | | HS W | / A HUUV |
| MTRE 1s-19/19 | 4 | 466 | | 3,814 | 99159851 |
| MTRE 1-19/19 | 5.5 | 466 | | 4,199 | 99159863 |
| MTRE 3-19/19 | 7.5 | 466 | | 4,582 | 99159865 |

Pipe Connections

MTRE 1s/1/3: G 1"1/4 (1"1/4 BSPF)

ELECTRIC MOTOR

380-500V 3ph 50/60Hz with IE5 efficiency IP55 Class F insulation

IMPORTANT

A Grundfos GO based communication device will be required in order to commission the "E" product. See page 22 for details. This device can be used to commission and monitor multiple pumps on multiple sites.



CATEGORY 2 - MOTOR STANDARDS, FPV PRODUCTS

MOTOR STANDARDS AND FPV PRICING

The table below generally indicates the Standard motors used in the UK for Grundfos Industrial Products.

Motor Factory Product Variants (FPV) are available for most motor variations - These include Heaters, different IP ratings and voltages etc.

If the FPV products are required please contact the Sales Office for information and pricing.

| | | | LIST PRICE ADDER | S | Motor Manufacturers used | |
|------|----------------|----------|------------------|------|--------------------------|------------|
| | Motor Rating | A/C Htrs | Thermistors | IP56 | | |
| | | | | | CR / MTR | NB / NK |
| 1ph | 0.37-1.1 kW | FPV | FPV | FPV | MG | N/A |
| Ipii | 1.5 - 2.2 kW | FPV | FPV | FPV | MG | N/A |
| | | • | | | | |
| | 0.37 - 0.75 kW | FPV | FPV | FPV | MG | MG |
| | 1.1 kW | FPV | FPV | FPV | MG | MG |
| | 1.5 - 2.2 kW | FPV | FPV | FPV | MG | MG |
| | 3 kW | FPV | STANDARD | FPV | MG | MG |
| | 4 kW | FPV | STANDARD | FPV | MG | MG |
| | 5.5 kW | FPV | STANDARD | FPV | MG | MG |
| | 7.5 kW | FPV | STANDARD | FPV | MG | MG |
| 3ph | 11 kW | FPV | STANDARD | FPV | MG | MG |
| Spii | 15 kW | FPV | STANDARD | FPV | MG | MG |
| | 18.5 kW | FPV | STANDARD | FPV | MG | MG/SIEMENS |
| | 22 kW | FPV | STANDARD | FPV | MG | MG/SIEMENS |
| | 30 kW | FPV | STANDARD | FPV | SIEMENS | SIEMENS |
| | 37 kW | FPV | STANDARD | FPV | SIEMENS | SIEMENS |
| | 45 kW | FPV | STANDARD | FPV | SIEMENS | SIEMENS |
| | 55 - 90 kW | FPV | STANDARD | FPV | SIEMENS | SIEMENS |
| | 110 - 200 kW | FPV | STANDARD | FPV | N/A | SIEMENS |

MOTOR STANDARDS

230 V 1ph 50Hz, IP55, Class F insulation 400 V 3ph 50Hz, IP55, Class F insulation

A/C Heaters are usually available in 110/1/50 Hz or 230/1/50 Hz, please specify at order stage

Pump motors with Tropicalized windings, ATEX compliance, special voltages and other makes are available on request 60 Hz voltages are also available with revised pump selections.

Note 1: IP56 for outdoor use can only be provided by Siemens motors on extended lead times.

Note 2: The Heaters and/or Thermistors need to be configured by the Sales Office to create a new pump part number.

CUSTOM BUILT PRODUCTS - CR, CRI, CRN MULTISTAGE PUMPS

In our Custom Built product range we are able to offer pumps to fulfil many alternative applications. We list some as follows :

- Group II Category 2G and 3G ATEX pumps for ATEX Zone 1 and Zone 2 areas;
- Air Cooled Top pumps for high temperatures on water and oil;
- Low temperature CRN pumps
- Horizontal mounting
- Low NPSH options
- Electropolished (hygienic surface finish)
- CRN MagDrive (magnetic coupling) for chemical applications
- Full stainless steel versions
- 4 poles motors
- Double back-to-back or tandem shaft seal

CATEGORY 2 - DOCUMENTATION AND TESTING

DOCUMENTATION

NB(E), NK(E), CR(I)(E), CM(E) AND MTR(E) PUMPS

All pumps will be supplied with one English (or multi-language) version of the appropriate Installation and operating instructions.

A separate Safety Instructions document which includes a CE Declaration of Conformity and electrical, safety and maintenance information is also included.

These documents will be included within the product packaging and further copies are available upon request.

Documents provided can also downloaded in pdf format from the Grundfos Product Center.

Any additional documentation requirements should be referred to your Sales Office contacts.

| CERTIFICATES & TESTING | | | | | | |
|---|-------------|----------|----------|----------|------------|----------------------|
| | Pump ranges | | | | | |
| | NB/NK | CR | MTR | CM | £ NET | Product Code |
| SALES OFFICE GENERATED CERTIFICATES (NOT COVERED BY EN10204) | | | | | PER PUMP | |
| Letter of conformity | √ | 1 | · | √ | FOC | CBI 00001 |
| (Certificate of Compliance with the Order 2.1 - Non specific inspection and testing) | • | | <u> </u> | | FUC | GBLOC001 |
| Typical Test Certificate (Test Report - Non specific inspection and testing 2.2) | ✓ | ✓ | ✓ | ✓ | 70 | GBTTC001 |
| PRODUCTION GENERATED CERTIFICATES EN10204 (must be requested at time of order) | | | | | | |
| Letter of conformity | √ | √ | ~ | ✓ | POA | 96507895 |
| Certificate of Compliance with the order according to EN 10204 2.1 | | • | • | • | PUA | 90307693 |
| Typical Test Certificate | √ | 1 | ./ | √ | POA | 96507896 |
| Test report according to EN 10204 2.2 - Non specific inspection and testing | • | | | | PUA | 96507896 |
| Duty point verification report according to ISO 9906:2012 grade 3B (3 point performance test) | ✓ | √ | √ | √ | POA | 96539699 |
| Standard test report according to ISO 9906:2012 grade 2B (5 point performance test) | ✓ | ✓ | ✓ | ✓ | POA | 96507930 |
| Inspection Contilients (FN 10204.2.1) includes budgestatis toots | <u> </u> | √ | | _ | DOA | 00007007 |
| Inspection Certificate (EN 10204 3.1) - includes hydrostatic tests | <u> </u> | <u>√</u> | <u> </u> | <u> </u> | POA POA | 96507897 |
| Inspection Certificate - Lloyds Register of Shipping LRS (EN 10204 3.2) | <u> </u> | <u>√</u> | <u> </u> | <u>√</u> | POA | 96507898 96507899 |
| Inspection Certificate - Det Norske Veritas DNV (EN 10204 3.2) | <u> </u> | <u>√</u> | <u> </u> | <u> </u> | | |
| Inspection Certificate - Germanischer Lloyd GL (EN 10204 3.2) | √ | <u>√</u> | <u>√</u> | <u>√</u> | POA | 96507920 |
| Inspection Certificate - Bureau Veritas BV (EN 10204 3.2) | <u> </u> | <u>√</u> | <u>√</u> | <u>√</u> | POA | 96507921 |
| Inspection Certificate - American Bureau of Shipping ABS (EN 10204 3.2) | | <u> </u> | <u> </u> | <u> </u> | POA POA | 96507922 |
| Inspection Certificate - Various other listed bodies | • | | | | PUA | On request |
| Material specification report (verification of main component materials used) | ✓ | ✓ | ✓ | ✓ | POA | 96507928 |
| Special material specification report with EN10204 3.1 material certificate for each main component | ✓ | ✓ | - | ✓ | POA | 96507929 |
| Surface roughness report according to ISO 1302 | - | ✓ | - | ✓ | POA | 96507931 |
| Vibration report according to ISO 5199 | ✓ | - | - | - | POA | 98443849 |
| Vibration report according to ISO 10816 | ✓ | ✓ | - | ✓ | POA | 96507932 |
| Motor test report | - | ✓ | - | ✓ | POA | 96507933 |
| PRODUCTION GENERATED REPORTS ON GRUNDFOS VARIANTS (must be requested at time of order) | | | | | | |
| Cleaned and dried pump but not tested after assembly | - | ✓ | - | ✓ | POA | 96507934 |
| Electro polished pump | - | ✓ | - | - | POA | 96507935 |
| PWIS free certificate | ✓ | - | - | - | POA | 98535593 |
| ATEX Approved Pump Report | ✓ | ✓ | ✓ | - | POA | 96512240 |

GENERAL NOTES

- 1 : All Production Test certificates and reports need to be agreed at order stage as these are incorporated into the pump product code cannot be produced retrospectively and must be arranged at time of order
- $2: All\ Production\ Test\ certificates\ except\ witness\ test\ certificates\ are\ included\ in\ the\ packaging$
- 3 : ALL PRICES ARE NET PER PUMP AND NOT SUBJECT TO ANY FURTHER DISCOUNT

| Notes |
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CONDITIONS OF SALE AND SERVICE

Customer's attention is particularly drawn to the provisions of condition 13 (Warranty and Limitation of Liability)

1 1

The definitions and rules of interpretation in this condition apply in these

Agreement: the contract between Grundfos and the Customer for the supply of Equipment and/or Services in accordance with the Order and these Condition Business Day: a day other than a Saturday. Sunday or bank or public holiday in England when banks in London are open for non-automated business. CDM Regulations: the Construction (Design and Management) Regulations 2015 Conditions: these terms and conditions as amended from time to time in

Customer: the person, firm or company who purchases Equipment and/or Services

Data Protection Legislation: all legislation and regulatory requirements in force from time to time relating to the use of personal data and the privacy of electronic communications, including, without limitation (i) any data protection legislation from time to time in force in the UK including the Data Protection Act 2018 or any successor legislation, as well as (ii) the General Data Protection Regulation ((EU) 2016/679) and any other directly applicable European Union regulation relating to data protection and privacy (for so long as and to the extent that the law of the European Union has legal effect in the UK).

Delivery Location: the location set out in the Order for delivery of the Equipment and/or Services or such other location as the parties may agree.

Equipment: all equipment, materials, goods and/or products, or any part or parts thereof, supplied by Grundfos to the Customer under this Agreement or used by Grundfos or its subcontractors in the supply of the Services.

Equipment Specification: any specification for the Equipment, including any relevant plans or drawings, that is agreed in writing by the Customer and Grundfos.

Event of Default: any occurrence of the events set out in condition 17.1 or 17.2. Force Majeure Event: acts, events, omissions or accidents beyond its reasonable control, including (without limitation) strikes, lock-outs or other industrial disputes (whether involving any supplier, contractor or agent of Grundfos or any other party beyond its reasonable control), failure of a utility service or transport network, act of God, war or threat of war, sabotage, riot, civil commotion, malicious damage, compliance with any law or governmental order, rule, regulation or direction, import or export embargoes, accident, breakdown of plant or machinery, fire, flood, storm or default of suppliers or subcontractors, difficulties in obtaining raw materials, labour, fuel, parts or machinery.

Grundfos: Grundfos Pumps Limited (Company No: 00805960) whose registered office is at Grovebury Road, Leighton Buzzard, Bedfordshire LU7 4TL

Health and Safety File: the health and safety file required by the CDM Regulations. **In-put Material:** all documents, information, tools and materials of the Custom required by Grundfos for the proper provision of the Services.

Intellectual Property Rights: patents, rights to inventions, copyright and related rights, trade marks, business names and domain names, rights in get-up, goodwill and the right to sue for passing off, rights in designs, database rights, rights to use, and protect the confidentiality of, confidential information (including know-how), and all other intellectual property rights, in each case whether registered or unregistered and including all applications and rights to apply for and be granted, renewals or extensions of, and rights to claim priority from, such rights and all similar or equivalent rights or forms of protection which subsist or will subsist now or in the future in any part of the world.

Maintenance Schedule: the maintenance schedule attached to the Order setting out the Services to be supplied by Grundfos to the Customer.
Order: the service support agreement or site visit request form in each case on

Grundfos' standard terms (whichever is applicable) including any schedules attached to the service support agreement or site visit request form.

Payment Schedule: the payment schedule attached to the Order setting out the charges applicable for the provision of the Services by Grundfos to the Customer Premium Service: the service package in accordance with Grundfos' terms as set out

Quotation: a written quotation issued by Grundfos.

Services: the services to be provided by Grundfos under this Agreement as set out in the Order or site visit request form together with any other services which Grundfos provides, or agrees to provide, to the Customer.

Site visit request form: Grundfos' Site Visit and Commissioning Request Form, or the equivalent internet log, which the Customer completes.

Time and Materials Rate: the rates set out in the Order.

Warranty: (Subject to condition 5.5) the warranty provided by Grundfos in respect of the Services as set out in condition 8.4 and Equipment as set out in condition 5.1 of these Conditions (as applicable).

Warranty Period: for product codes UPS2, UPS3, ALPHA1, ALPHA2, ALPHA3 and SCALA2 the warranty period shall be 5 years from the date of the manufacture and in all other cases the warranty period shall be 24 months from installation or 30 months from the date of manufacture (whichever expires soonest).

- Headings in these conditions shall not affect their interpretation
- 1.3 A person includes a natural person, corporate or unincorporated body (whether or not having separate legal personality).
- The schedules and annexes form part of this Agreement 1.4 1.5
- A reference to writing or written includes fax and email and electronic chat
- Any obligation in this Agreement on a person not to do something includes, without limitation, an obligation not to agree, allow, permit or acquiesce in that thing being 1.6
- 1.7 References to schedules and annexes are to the schedules and annexes of the Order
- A reference to a statute or statutory provision is a reference to it as amended or re-1.8 enacted. A reference to a statutory provision includes all subordinate legislation make under that stature or statutory provision.

Basis of Agreement

- 2.1 The Order constitutes an offer by the Customer to purchase Equipment and/or Services in accordance with these Conditions.
- 2.2 The Order shall only be deemed to be accepted on the earlier of: (a) an authorised representative of Grundfos issues written acceptance of the Order: or
 - (b) Grundfos delivers the Equipment and/or commences providing Services to the Customer in line with the Order, at which point and on which the date this Agreement shall come into existence.
- Any samples, drawings, descriptive matter or advertising issued by Grundfos and any 2.3 descriptions of the Equipment or illustrations or descriptions of the Services contained in Grundfos' catalogues or brochures are issued or published for the sole purpose of giving an approximate idea of the Services and/or Equipment described

No warranty or guarantee is given for their accuracy and they shall not form part of this Agreement or have any contractual force.

2 4 These Conditions shall:

(a) apply to and be incorporated into this Agreement;

(b) prevail over any other terms that the Customer seeks to impose or incorporate:

(c) prevail over any terms or conditions implied by law, trade custom, practice or course of dealing between Grundfos, the Customer or otherwise.

- These Conditions are subject to any terms, conditions and/or provisions set out in the Order. In the event of any conflict between the terms of these Conditions and the terms of the Order, the provisions of the Order shall prevail, but any special terms granted in respect of any one Order are not applicable to any subsequent Order without the express consent in writing by Grundfos. Quotations shall only be valid if issued in writing.
- 2.6
- 27 Any Quotations are given on the basis that no Agreement shall come into existence except in accordance with condition 2.2. Any Quotation is valid for a period of 30 days from its date (unless otherwise agreed by Grundfos), provided that Grundfos has not previously withdrawn it.
- 2.8 All of these Conditions shall apply to the supply of both Equipment and Services
- except where application to one or the other is specified.

 Any special terms agreed to by Grundfos for any Order shall not apply to any subsequent Order without the express agreement of an authorised representative of Grundfos.
- 2.10 The Customer is responsible for ensuring the accuracy of the terms of the Order and for providing to Grundfos in good time any necessary information required by Grundfos to enable Grundfos to perform its obligations under the Agreement.
- 2.11 Grundfos' minimum order value is £55.00. Orders between £55.00 and £335 for pumps or £130 for Category 4 items will be subject to a £37 handling fee.

Equipment

- 3.1 The Equipment is described in Grundfos' catalogues as modified in any Equipment Specification.
- Unless confirmed in writing by Grundfos, Grundfos makes no representation as to the suitability of the Equipment for the Customer's particular purpose. The 3 2 Customer will be responsible for ensuring that the Equipment is suitable for its particular purpose and Grundfos shall have no liability to the Customer if the Equipment is not suitable for the Customer's particular purpose (so far as legally nossible).
- 3.3 Grundfos (and/or its subcontractors, suppliers or agents) reserves the right to: (a) change the design, construction or composition of the Equipment or the materials or equipment used in the Equipment as it shall think fit; and (b) amend the Equipment Specification of the Equipment if required by any applicable statutory requirements, and shall, in any case, notify the Customer of any such changes (if such changes are effected after this Agreement has come into existence but before the Equipment and/or Services have been fully performed). Samples of Equipment are available for inspection at Grundfos' offices. The samples
- are ex stock at the time of viewing and are without guarantee as to colour or dimensions at the time of delivery. The viewing of a sample does not create a sale by sample.

Delivery of Equipment

- Grundfos shall deliver the Equipment to the Delivery Location. 4.1
- 4 2

Delivery of the Equipment shall be completed on:
(a) the completion of unloading of the Equipment at the Delivery Location or (in the absence of any specified Delivery Location by the Customer) upon Grundfos informing the Customer that the Equipment is ready; or

(b) (if the Customer or its agents and/or representatives elect to unload the Equipment themselves) upon Grundfos placing the Equipment at the disposal of the Customer, its agents or representatives at the agreed point.

- Grundfos' obligation under condition 4.1 is limited to delivering the Equipment only as near to the Delivery Location as a safe hard road permits. The Customer is to 4.3 provide to Grundfos, free of charge, reasonable assistance with unloading (unless the Customer elects to unload the Equipment itself).
- 4.4 Any dates quoted for delivery of the Equipment are approximate only, and the time and dates quotes for delivery of the Equipment are approximate only, and the third of delivery is not of the essence. Grundfos shall not be liable for any delay (or any additional costs arising out of the delay) in delivery of the Equipment that is caused by a Force Majeure Event or the Customer's failure to provide Grundfos with adequate delivery instructions or any other instructions that are relevant to the supply of the Equipment.
- The Equipment may be delivered in advance of the quoted delivery date upon giving reasonable notice to the Customer. 4.5
- 46 If the Customer fails to take delivery of the Equipment or fails to give Grundfos adequate delivery instructions at the time stated for delivery (otherwise than by reason of Grundfos' sole fault) then, without prejudice to any other right or remedy available to Grundfos:
 - (a) delivery of the Equipment shall be deemed to have been completed at 9.00am on the next Business Day following the day on which Grundfos notified the Customer that the Equipment was ready; and (b) Grundfos may:
 - (i) Charge a re-delivery fee if delivery is rearranged by Grundfos and the Customer; (ii) store the Equipment until actual delivery takes place, and charge the Customer for all related costs and expenses (including insurance) of such storage;
 - (iii) apply Grundfos' returns policy as set out in condition 6; or (iv) sell the Equipment at the best price readily obtainable and (after deducting all reasonable storage and selling expenses) charge the Customer for any
 - shortfall below the price payable by the Customer for the Equipment and Services (as applicable) under this Agreement.
- If the parties have agreed on express delivery, the dates quoted for such delivery 4.7 and agreed delivery dates are approximate only as delivery may vary due to factors not within Grundfos' reasonable control, e.g. leisurely or delayed customs clearance or other import or export obstacles. The parties agree that time of delivery is not of the essence and that Grundfos shall not be liable for any delay (or any additional costs arising out of the delay) in delivery caused by such events.
- Grundfos may deliver the Equipment by instalments.
- If Equipment is not received by the customer within 7 days of notification of dispatch by Grundfos or if it is received in a damaged condition or the quantity received differs from the quantity advised by Grundfos the Customer shall notify 4.9 Grundfos in writing. If such written notice is not received by Grundfos within 10 days of the date of Grundfos' dispatch notification, Grundfos will not be liable in respect of any loss or damaged suffered.
- 4.10 If a proof of delivery is required a £10 handling fee will apply.
- Proof of delivery shall only be retained by Grundfos for 3 months following delivery. 4.11 After 3 months it shall be assumed by both parties that delivery successfully took place unless there is evidence to the contrary.
- A £20 handling fee will apply per order to all orders for spares, pump components, spares kits and ancillary items such as flanges, unions etc. 4.12



Quality of Equipment

5.1 For the duration of the Warranty Period, Grundfos warrants that the Equipment

> (a) (subject to conditions 5.3 and 5.4) conform in all material respects with the Equipment Specification: and

(b) be free from defects in design, material and workmanship.

5.2 Subject to condition 5.3, if:

(a) the Customer gives notice in writing during the Warranty Period within 14 days of discovery that some or all of the Equipment does not comply with the Warranty set out in condition 5.1:

(b) Grundfos is given a reasonable opportunity to examine such Equipment; and (c) the Customer (if reasonably asked to do so by Grundfos) returns such Equipment to Grundfos (at Grundfos' cost), then Grundfos shall, at its option, repair or replace the defective Equipment, or refund the price of the defective Equipment in full. Repairs shall only be carried out between 8am and 5pm on Business Days agreed between Grundfos and Customer.

5.3 Grundfos shall not be liable for the Equipment's failure to comply with the Warranty

> (a) the Customer makes any further use of such Equipment after giving a notice in accordance with condition 5.2 unless otherwise approved by Grundfos (such approval not to be withheld unreasonably);

> (b) the defect arises because the Customer failed to follow Grundfos' or manufacturer's oral or written instructions as to the storage, installation, commissioning, use or maintenance of the Equipment or (if there are none) good trade practice;

(c) the defect arises as a result of Grundfos following any drawing, design supplied by the Customer or the Equipment Specification;

(d) the Customer alters, dismantles or repairs such Equipment without the written consent of Grundfos:

(e) the defect arises as a result of fair wear and tear, wilful damage, negligence, or abnormal working conditions: or

(f) the Equipment differs from its description as a result of changes made to ensure they comply with applicable statutory or regulatory standards.

Except as provided in this condition 5, Grundfos shall have no liability to the Customer in respect of the Equipment's failure to comply with the Warranty. 5.4

5.5 The terms of these Conditions shall apply to any repaired or replacement Equipment supplied by Grundfos under condition 5.2 but for the avoidance of doubt, the Warranty Period for any repaired or replaced Equipment shall be 12 months from the date of the repair. Return of Equipment

6 1 Equipment may not be returned to Grundfos except by the prior written permission of an authorised representative of Grundfos. Contact grundfosuk@sales.grundfos.com with the original purchase order number to arrange a return. Any such return shall be liable for any handling and restocking fees charged by Grundfos.

6.2 All Equipment requested to be returned to Grundfos will be subject to a minimum 35% restocking fee (subject to inspection). Equipment must be returned in its original packaging.

Equipment can only be returned within 6 months of the date of dispatch by 6.3 Grundfos. All returns will be subject to inspection to ascertain age, condition and

Equipment returned without prior authorisation will be refused delivery by Grundfos.

The following Equipment cannot be returned for credit in any circumstance: (a) items with a net value of less than £125 (per item):

(b) repair kits, power cable, engineered to order, third party sourced and obsolete

Any Equipment that has been in contact with hazardous liquids must be cleaned, 6.6 sealed in appropriate packaging, clearly labelled and accompanied by a COSHH certification by the Customer. Any carrier used must be licensed to carry to transport the relevant hazardous liquids.

Title and Risk

7.3

7.1 The risk in the Equipment shall pass to the Customer on completion of delivery in accordance with condition 4.

Title to the Equipment shall not pass to the Customer until Grundfos receives payment in full (in cash or cleared funds) for the Equipment and any other 7 2 equipment or goods that Grundfos has supplied to the Customer in respect of which payment has become due in which case title to the Equipment shall pass at the time of payment of all such sums.

Until title to the Equipment has passed to the Customer, the Customer shall: (a) hold the Equipment (or any receipts received from the Customer where the Customer has sold the Equipment) on a fiduciary basis as Grundfos' bailee; (b) store the Equipment separately from all other goods held by the Custome (where possible) so that they remain readily identifiable as Grundfos' property: (c) not remove, deface or obscure any identifying mark or packaging on or relating to the Equipment (unless reasonably required for the functioning use of the

Equipment by the Customer); (d) maintain the Equipment in satisfactory condition and keep it insured against all risks for their full price on Grundfos' behalf from the date of delivery

(e) notify Grundfos immediately if the Customer becomes subject to any Event of Default;

(f) give Grundfos such reasonable information relating to the Equipment as Grundfos may require from time to time:

(g) give Grundfos at least 30 days' notice of its intention to move or relocate the Equipment to a new location. Grundfos may (at Grundfos' sole discretion) supervise the dismantling and removal of the Equipment, and inspect and reinstall the Equipment at the new location. Any supervision and work undertaken in respect of the relocation shall be charged at the

prevailing Time and Material Rates and is payable by the Customer in accordance with condition 11; and

(h) give Grundfos at least 14 days' notice of its intention to take any steps to appoint an administrator.

7.4 The Customer may incorporate the Equipment into or with any other goods provided that any new goods incorporating the Equipment shall become the sole and exclusive property of Grundfos and shall be separately stored and marked so as to be identifiable as being

manufactured by or containing Equipment belonging to Grundfos. Subject to condition 7.7, the Customer may resell the Equipment in the ordinary course of its business (but not otherwise) before Grundfos receives payment for the 75 Equipment. However, if the Customer resells the Equipment before that time: (a) It does so as principal and not as Grundfos' agent;

(b) Title to the Equipment shall pass from Grundfos to the Customer immediately

before the time at which resale by the Customer occurs.

If before title to the Equipment passes to the Customer the Customer becomes

7.6 subject to an Event of Default, then, without limiting any other right or remedy Grundfos may have, Grundfos may at any time:

(a) the Customer's right to resell the Equipment or use it in the ordinary course of its

(b) reasonably require the Customer to deliver up all Equipment in its possession:

(c) if the Customer fails to do so promptly, enter any premises of the Customer where the Equipment is stored in order to recover them; and (d) the Customer shall pay Grundfos' reasonable costs (including legal costs) for any

recovery of the Equipment pursuant to condition 7.7(c).

8. 8.1

Grundfos shall provide the Services to the Customer in accordance with the Maintenance Schedule in all material respects and in accordance with the duration and timescales specified in the Order.

2 2 Grundfos shall use all reasonable endeavours to meet any performance dates for the Services specified in this Agreement, but any such dates shall be estimates only and time shall not be of the essence for the performance of the Services.

Grundfos shall have the right to make any changes to the Services which are necessary to comply with any applicable law or safety requirement, or which do not materially affect the nature or quality of the Services, and Grundfos shall notify the Customer in any such event. If Grundfos requests a change for any other reason, the 8.3 Customer shall not unreasonably withhold or delay consent to it.

8.4 Grundfos warrants to the Customer that the Services will be provided using reasonable care and skill.

Grundfos shall use reasonable endeavours to observe all health and safety rules and 8.5 regulations, and any other reasonable security requirements that apply at the Customer's premises and that have been communicated to it provided that it shall not be liable under this Agreement if, as a result of such observation, it is in breach of any of its obligations under this Agreement.

Maintenance Service Times

9 1 Services will be carried out during the working times as specified in the Maintenance Schedule

Grundfos' standard daily fee rates for each individual person are calculated on the 9.2 basis of an eight-hour day between 8.00am and 5.00pm on Business Days. Grundfos shall be entitled to charge for any Services undertaken outside of these hours at the Time and Materials Rate in effect at the relevant time

Grundfos shall use reasonable endeavours to attend the Delivery Location, but if Grundfos is prevented by any reason outside his control or under the control of the 9.3 Customer, from installing the Equipment or carrying out the Services at the time of the visit, it shall not constitute a material breach of this Agreement. If additional visits are required to the Delivery Location which are not accounted for in the Maintenance Schedule, Grundfos reserves the right to charge the Customer at the Time and Materials Rate for all additional time incurred.

10. Customer's obligations

10.1 The Customer shall:

(a) ensure that the terms of the Order and the Equipment Specification are complete and accurate;

(b) co-operate with Grundfos in all matters relating to this Agreement: (c) provide Grundfos, its employees, agents, consultants and subcontractors, with access to the Customer's premises, office accommodation and other facilities as reasonably required by Grundfos to provide the Services and/or deliver the Equipment;

(d) prepare the Customer's premises (or the location where the Services are to be performed) for the supply of the Services and/or the Equipment;

(e) provide adequate lighting, heating, power and ventilation as per Grundfos' reasonable requirements;

(f) inform Grundfos' engineer or representative on each visit about any unsatisfactory running or irregular performance of the Equipment or equipment in respect of which the Services are undertaken. (g) ensure the Equipment is installed and kept in suitable premises and under

suitable conditions, permit only trained and competent personnel to use it and follow any operating instructions as Grundfos may give from time to time; (h) provide a site visit request form to Grundfos in respect of any Services to be carried out by Grundfos, its agents, subcontractors, consultants or employees (as the case may be):

(i) provide to Grundfos, in a timely manner, such In-put Material and other information as Grundfos may require and ensure that it is accurate in all material

(i) be responsible (at its own cost) for preparing and maintaining the relevant premises for the supply of the Services and/or Equipment, including identifying, monitoring, removing and disposing of any hazardous materials from its premises in accordance with all applicable laws, before and during the supply of the Services

and/or Equipment at those premises; (k) inform Grundfos of all health and safety rules and regulations and any other reasonable security requirements that apply at the Customer's premises; (I) ensure that all In-Put Materials are in good working order and suitable for the

purposes for which it is used in relation to the Services:

(m) keep all Grundfos' materials, equipment, documents and other property (Grundfos Property) at the Customer's premises in safe custody at its own risk, keep all Grundfos Property in good condition until returned to Grundfos and not dispos of or use the Grundfos Property other than in accordance with Grundfos' written instructions and authorisations: and

(n) obtain and maintain all necessary licences and consents and comply with all relevant legislation in relation to the Services, the installation of the Equipment and the use of In-put Material in all cases before the date on which the Services are to start.

If Grundfos' performance of any of its obligations in respect of the Services is prevented or delayed by any act or omission by the Customer (including its agents, subcontractors, consultants or employees) or failure by the Customer to perform 10.2 any relevant obligation (Customer Default):

(a) Grundfos shall without limiting its other rights or remedies have the right to suspend performance of the Services until the Customer remedies the Customer Default, and to rely on the Customer Default to relieve it from the performance of any of its obligations under this Agreement to the extent the Customer Default prevents or delays Grundfos' performance of any of its obligations;

(b) Grundfos shall not be liable for any costs or losses sustained or incurred by the Customer arising directly or indirectly from Grundfos' failure or delay to perform any of its obligations as set out in this condition 10.2; and

(c) the Customer shall reimburse Grundfos on written demand for any costs or losses sustained or incurred by Grundfos arising directly or indirectly from the Customer Default.

10.3 The Customer shall be liable to pay to Grundfos, on demand, all reasonable costs, charges or losses sustained or incurred by Grundfos (including, without limitation, any direct, indirect or consequential losses, loss of profit and loss of reputation, loss or damage to property and those arising from injury to or death of any person and loss of opportunity to deploy resources elsewhere) arising directly or indirectly from the Customer's fraud,

negligence, failure to perform or delay in the performance of any of its obligations under this Agreement, subject to Grundfos confirming such costs, charges and losses to the Customer in writing.



10.4 The Customer shall not, without the prior written consent of Grundfos, at any time from the date of this Agreement to the expiry of 12 months after the last date of supply of the Services, solicit or entice away from Grundfos or employ (or attempt to employ) any person who is, or has been, engaged as an employee of Grundfos in the provision of the Services.

11. The CDM Regulations

- The Customer and Grundfos agree that the Customer is to be treated for the purposes of the CDM Regulations as the Client for the purposes of the CDM . Regulations
- 11.2 The Customer agrees to ensure that the Works are carried out in accordance with
- the CDM Regulations.
 The Customer shall ensure that the Health and Safety File is maintained correctly 11.3 and is available for inspection in accordance with the CDM Regulations
- The Customer shall indemnify and keep the Owner indemnified against liability for any breach of the Customer's obligations under or in connection with this condition

Charges and Payment

- 12 1 The price for the Equipment shall be the price set out in the Order or, if no price is quoted, the price set out in the published price list of Grundfos (or Grundfos as the case may be) as at the date of delivery. Unless otherwise stated in the Order, the price of the Equipment is exclusive of all costs and charges of packaging, insurance, transport of the Equipment, which shall be paid by the Customer when it pays for
- In the case of Product Services Service contracts, Installation Works and Engineered to Order products Grundfos reserves the right to request a deposit payment and/or payment milestones. The amount or means of calculating such payment shall be set out in the Quotation.
- Grundfos reserves the right to require (at its option) a parent company guarantee or a personal guarantee from the directors of the Customer at any time in relation to 12.3 all outstanding amounts due to Grundfos from the Customer from time to time.
- The charges for Services shall be set out in the Payment Schedule.
- 12.5 Unless stated otherwise all prices are given on a DAP (delivered at place) basis

Grundfos reserves the right to:

(a) increase its standard daily fee rates for the Services. Grundfos will give the Customer reasonable notice in writing of any such increase before the proposed date of the increase. If such increase is not acceptable to the Customer, it shall notify Grundfos in writing within 14 days of the date of Grundfos' notice and either of Grundfos or the Customer shall have the right, without limiting its other rights or remedies, to terminate

this Agreement by giving 14 days' written notice (or any other reasonable notice period if performance of the Order is due to commence within 14 days) to Grundfos or Customer (as applicable); and

(b) increase the price of the Equipment, by giving notice to the Customer at any time before delivery, to reflect any increase in the cost of the Equipment to Grundfos that

(i) any factor beyond the control of Grundfos (including foreign exchange fluctuations, increases in taxes and customs' charges and duties, and increases in labour, materials, fuel and other manufacturing costs);

(ii) any request by the Customer to change the delivery date(s), quantities or types of Equipment ordered, or the Equipment specification; or (iii) any delay caused by any instructions of the Customer in respect of the Equipment or failure of the Customer to give Grundfos adequate or

accurate information or instructions in respect of the Equipment. In respect of Equipment, Grundfos shall invoice the Customer on or at any time after completion of delivery. If delivery of the Equipment is made in instalments,

12.7 Grundfos may invoice the Customer in instalments. In respect of Services, Grundfos shall invoice the Customer in accordance with the Payment Schedule 12.8 The Customer shall pay each invoice submitted by Grundfos:

(a) within 30 days of the date of the invoice or in accordance with any other payment terms agreed by Grundfos in writing; and

(b) in full and in cleared funds to a bank account nominated in writing by Grundfos, and time for payment shall be of the essence of this Agreement.

All amounts payable by the Customer under this Agreement are exclusive of amounts in respect of value added tax chargeable from time to time (VAT). The 12.9 Customer shall pay any VAT which is chargeable on the supply of the Services and/or Equipment at the same time as payment is due for the supply of the Services and/or Equipment.

Grundfos may in its sole discretion elect to provide a credit facility to the Customer but is not obliged to do so. Any credit facility offered will be on written terms agreed 12.10 by Grundfos and the Customer.

Without prejudice to any other right or remedy that it may have, if the Custom fails to pay Grundfos on the due date, Grundfos may: 12.11

(a) charge interest on such sum from the due date for payment at an annual rate equal to the set rate of interest provided under the Late Payment of Commercial Debt (Interest) Act 1998 as varied from time to time accruing on a daily basis and being compounded quarterly until payment is made, whether before or after any judgment and the Customer shall pay the interest immediately on demand; (b) charge compensation for late payment at a set rate depending on the size of the debt in accordance with the Late Payment of Commercial Debt Regulations 2002 (SI 2002 No 1674). The minimum charge applicable is £40.00, the maximum applicable

(c) appropriate any payment by the Customer to any outstanding invoice as Grundfos may think fit not withstanding any purported appropriation by the

(d) suspend the provision of further Services until payment has been made in full. The Customer shall pay all amounts due under this Agreement in full without any 12.12 set-off, counterclaim, deduction or withholding except as required by law. Grundfos may, without limiting its other rights or remedies, set off any amount owing to it by the Customer against any amount payable by Grundfos to the Customer.

All sums payable to Grundfos under this Agreement shall become due immediately on its termination, despite any other provision. This condition 12.10 is without 12.13 prejudice to any right to claim for interest under the law, or any such right under

Grundfos shall have a lien on all of the Customer's property in Grundfos' possession 12.14 for all sums due at any time by the Customer to Grundfos subject to Grundfos giving not less than one month's written notice to the Customer. Grundfos shall be entitled to use, sell and dispose of any such property as agent for the Customer at the Customer's expense. The proceeds of such sale shall be applied towards the payment of monies due to Grundfos and Grundfos shall be discharged of any liability in relation to such property as a result of any sale.

Warranty and Limitation of Liability

THE CUSTOMER'S ATTENTION IS SPECIFICALLY DRAWN TO THIS CONDITION Nothing in these Conditions shall limit or exclude Grundfos' liability for: 13.1 (a) death or personal injury caused by its negligence, or the negligence of its employees, agents or subcontractors; $\frac{1}{2} \int_{-\infty}^{\infty} \frac{1}{2} \int_{-\infty}^{\infty} \frac{1}{2}$ (b) fraud or fraudulent misrepresentation:

(c) breach of the terms implied by section 2 of the Supply of Goods and Services Act 1982 (title and quiet possession);

(d) breach of the terms implied by section 12 of the Sale of Goods Act 1979 (title and quiet possession); or

(e) defective products under the Consumer Protection Act 1987.

13.2 Subject to condition 13.1:

(a) Grundfos shall under no circumstances whatsoever be liable to the Customer. whether in contract, tort (including negligence), breach of statutory duty, or otherwise, for any loss of profit, turnover, data, business opportunity, anticipated savings, any indirect or consequential loss or any damage to goodwill arising under or in connection with this Agreement;

(b) Grundfos' total liability to the Customer where the Customer has provided Grundfos with incorrect weights, dimensions, capacity performance or other information shall in no circumstances exceed the price of the Equipment supplied in accordance with such incorrect information: and

(c) Grundfos' total liability to the Customer in respect of all other losses arising under or in connection with this Agreement, whether in contract, tort (including negligence), breach of statutory duty, or otherwise, shall in no circumstances exceed

- The terms implied by sections 13 to 15 of the Sale of Goods Act 1979 and the terms implied by sections 3 to 5 of the Supply of Goods and Services Act 1982 are, to the fullest extent permitted by law, excluded from this Agreement. 133
- This condition 13 shall survive termination of this Agreement.

 The Customer shall indemnify Grundfos for any costs suffered by Grundfos for 13.5 claims from any third party which arise by virtue of the Customer having resold the Equipment (unless such claim arises solely from Grundfos' negligence).

14. 14.1

Confidentiality and Grundfos' property
Each party (receiving party) shall keep in strict confidence all technical or commercial know-how, specifications, inventions, processes or initiatives which are of a confidential nature and have been disclosed to the receiving party by the other party (disclosing party), its employees, agents or subcontractors, and any other confidential information concerning the disclosing party's business, its products and services which the receiving party may obtain. The receiving party shall only disclose such confidential information to those of its employees, agents and subcontractors who need to know it for the purpose of discharging the receiving party's obligations under this Agreement, and shall ensure that such employees, agents and subcontractors comply with the obligations set out in this condition as though they were a party to this Agreement. The receiving party may also disclose such of the disclosing party's confidential information as is required to be disclosed by law, any governmental or regulatory authority or by a court of competent jurisdiction. Neither party shall use the other's confidential information for any purpose other

14.2 than to perform its obligations under this Agreement.

Intellectual Property Rights

- 15.1 (Subject to condition 15.2) all Intellectual Property Rights in or arising out of or in connection with:
 - (a) the Equipment:
 - (b) the Services; or

(c) any manuals or documentation given by Grundfos to the Customer. shall be owned by Grundfos and nothing in this agreement shall transfer or assign any such Intellectual Property Rights to the Customer.

- The Customer acknowledges that, in respect of any third party Intellectual Property Rights, the Customer's use of any such Intellectual Property Rights is conditional on 15 2 Grundfos first obtaining a written licence from the relevant licensor on such terms as will entitle Grundfos to license such rights to the Customer.
- 15.3 The Customer grants to Grundfos a fully paid up, non-exclusive, royalty free, nontransferable licence to copy and modify any In-put Material for the purpose of providing the Services to the Customer.
- The Customer shall indemnify Grundfos against all liabilities, costs, expenses, damages and losses (including any direct, indirect or consequential losses, loss of 15.4 profit, loss of reputation and all interest, penalties and legal costs (on a full indemnity basis) and all other reasonable professional costs and expenses) suffered or incurred by Grundfos for actual or alleged infringement of a third party's Intellectual Property Rights arising out of or in connection with Grundfos' use of the Equipment Specification.

16. Data protection 16.1

Both parties will comply with all applicable requirements of the Data Protection Legislation. This condition 16 is in addition to, and does not relieve, remove or replace, a party's obligations under the Data Protection Legislation. In this condition 16 Applicable Laws means (for so long as and

to the extent that they apply to the Supplier) the law of the European Union, the law of any member state of the European Union and/or Domestic UK Law; and Domestic UK Law means any Data Protection Legislation from time to time in force in the UK

including the Data Protection Act 2018 or any successor legislation.
Without prejudice to the generality of condition 16.1 each party shall, in relation to 16.2 any Personal Data processed in connection with the performance by that party of its obligations under the Agreement:

(a) ensure that it has in place appropriate technical and organisational measures to protect against unauthorised or unlawful processing of Personal Data and against accidental loss or destruction of, or damage to, Personal Data, appropriate to the harm that might result from the unauthorised or unlawful processing or accidental loss, destruction or damage and the nature of the data to be protected, having regard to the state of technological development and the cost of implementing any measures (those measures may include, where appropriate, pseudonymising and encrypting Personal Data, ensuring confidentiality, integrity, availability and resilience of its systems and services, ensuring that availability of and access to Personal Data can be restored in a timely manner after an incident, and regularly assessing and evaluating the effectiveness of the technical and organisational measures adopted by it):

(b) assist the other party, at the other party's cost, in responding to any request from a Data Subject and in ensuring compliance with its obligations under the Data Protection Legislation with respect to security, breach notifications, impact assessments and consultations with supervisory authorities or regulators;

(c) notify the Customer without undue delay on becoming aware of a Personal Data (d) at the written direction of the other party, delete or return Personal Data and

copies thereof to the other party on termination of the agreement unless required by Applicable Law to store the Personal Data; and (e) maintain complete and accurate records and information to demonstrate its

compliance with this condition 16.

Neither party consents to the other appointing any third-party processor of Personal Data under the Contract. 163

17. 17.1 Termination

Without limiting its other rights or remedies, Grundfos or Customer may terminate this Agreement with immediate effect by giving written notice to the other party if: (a) the other party commits a material breach of its obligations under this Agreement and (if such breach is remediable) fails to remedy that breach within 7 days after receipt of written notice to do so;



(b) the other party takes any step or action in connection with its entering administration, provisional liquidation or any composition or arrangement with its creditors (other than in relation to a solvent restructuring), being wound up (whether voluntarily or by order of the court, unless for the purpose of a solvent restructuring), having a receiver appointed to any of its assets or ceasing to carry on business [or, if the step or action is taken in another jurisdiction, in connection with any analogous procedure in the relevant jurisdiction;

(c) the other party suspends, or threatens to suspend, or ceases or threatens to cease to carry on all or a substantial part of its business; or (d) the other party's financial position deteriorates to such an extent that in the

terminating party's opinion the other party's capability to adequately fulfil its obligations under the Contract has been placed in jeopardy.

17 2 Without limiting its other rights or remedies, Grundfos may terminate this Agreement with immediate effect by giving written notice to the Customer if: (a) there is a change of control of the Customer (as defined in section 574 of the Capital Allowances Act 2001);
(b) the Customer is unable or unwilling to procure any guarantee required by

Grundfos in accordance with condition 12 3: or (c) the Customer's financial position deteriorates to such an extent that in Grundfos'

opinion the Customer's capability to adequately fulfil its obligations under the Contract has been placed in jeopardy or Customer fails to pay any amount due under this Agreement on the due date for payment.

17.3 Without limiting its other rights or remedies, Grundfos may suspend the supply of Services or all further deliveries of Equipment under this Agreement or any other agreement between the Customer and Grundfos if the Customer becomes subject to an Event of Default, or Grundfos reasonably believes that the Customer is about to become subject to any of them.

17.4

On termination of this Agreement for any reason:
(a) the Customer shall immediately pay to Grundfos all of Grundfos' outstanding unpaid invoices and interest and, in respect of Services supplied but for which no invoice has yet been submitted, Grundfos shall submit an invoice, which shall be payable by the Customer immediately on receipt;

(b) the Customer shall return all of Grundfos' materials and any deliverables which have not been fully paid for and which have not been installed as part of a bigger system. If the Customer fails to do so, then Grundfos may enter the Customer's premises and take possession of them. Until they have been returned, the Customer's premises and take possession of them. shall be solely responsible for their safe keeping and will not use them for any purpose not connected with this Agreement; (c) the accrued rights and remedies of the parties as at termination shall not be

affected, including the right to claim damages in respect of any breach of this Agreement which existed at or before the date of termination or expiry; (d) conditions which expressly or by implication have effect after termination shall continue in full force and effect; and

(e) Grundfos shall have a lien over all of the Customer's property in Grundfos possession in respect of all sums due at any time from the Customer to Grundfos. Provided that Grundfos gives at least 14 days' prior written notice, Grundfos shall be entitled to use, sell and dispose of such property as agent for and at the expense of the Customer and apply the proceeds towards the payment of monies due and outstanding from the Customer to Grundfos. Thereafter, Grundfos shall be

discharged of any liability in respect of the Customer's property.

On termination of this Agreement (however arising), any of these Conditions that expressly or by implication is intended to have effect after termination (or expiry) shall survive and continue in full force and effect.

18. Force maieure

Grundfos shall have no liability to the Customer under this Agreement if it is prevented from, or delayed in performing, its obligations under this Agreement or from carrying on its business by any Force Majeure Event.

19.

Except as provided in these Conditions, no variation of this Agreement or these Conditions or of any of the documents referred to in them shall be valid unless it is in writing and signed by or on behalf of each of the authorised representatives of

20. Waiver

A waiver of any right under this Agreement is only effective if it is in writing and it applies only to the circumstances for which it is given. No failure or delay by a party 20.1 in exercising any right or remedy under this Agreement or by law shall constitute a waiver of that (or any other) right or remedy, nor preclude or restrict its further exercise. No single or partial exercise of such right or remedy shall preclude or restrict the further exercise of that (or any other) right or remedy.

Unless specifically provided otherwise, rights arising under this Agreement are

20.2 cumulative and do not exclude rights provided by law.

21. 21.1

If any provision of this Agreement (or part of any provision) is found by any court or other authority of competent jurisdiction to be invalid, illegal or unenforceable, that provision or part-provision shall, to the extent required, be deemed not to form part of this Agreement, and the validity and enforceability of the other provisions of this Agreement shall not be affected. 21.2

If a provision of this Agreement (or part of any provision) is found illegal, invalid or unenforceable, the provision shall apply with the minimum modification necessary to make it legal, valid and enforceable

22.1 This Agreement constitutes the whole agreement between the parties and supersedes all previous agreements between the parties relating to its subject

Each party acknowledges that, in entering into this Agreement, it has not relied on, and shall have no right or remedy in respect of, any statement, representation, assurance or warranty (whether made negligently or innocently) (other than for 22.2

breach of contract), as expressly provided in this Agreement.

Nothing in this condition shall limit or exclude any liability for fraud. 22.3

23. Assignment 23.1

The Customer shall not, without the prior written consent of Grundfos, assign, transfer, charge, mortgage, subcontract or deal in any other manner with all or any of its rights or obligations under this Agreement.

Grundfos may at any time assign, transfer, charge, mortgage, subcontract or deal in

23.2 any other manner with all or any of its rights under this Agreement and may subcontract or delegate in any manner any or all of its obligations under this Agreement to any third party or agent.

Each party that has rights under this Agreement is acting on its own behalf and not 23.3 for the benefit of another person.

24.

No partnership or agency
Nothing in this Agreement is intended to, or shall be deemed to, constitute a partnership or joint venture of any kind between any of the parties, nor constitute any party the agent of another party for any purpose. No party shall have authority to act as agent for, or to bind, the other party in any way

25. Rights of third parties

A person who is not a party to this Agreement shall not have any rights under or in connection with it.

Notices 26.

- 26.1 Any notice required to be given under this Agreement shall be in writing and shall be delivered personally, or sent by pre-paid first-class post, recorded delivery or by commercial courier to the registered office or the address stated in the Order (or as otherwise notified to the other party in writing).
- Any notice shall be deemed to have been duly received if delivered personally, when left at the correct address or, if sent by pre-paid first-class post or recorded delivery, at 9.00am on the second Business Day after posting, or if delivered by commercial 26.2 courier, on the date and at the time that the courier's delivery receipt is signed.
- This condition 26 shall not apply to the service of any proceedings or other 26.3 documents in any legal action.
- 26.4 A notice required to be given under this Agreement shall also be validly served if sent by e-mail

Governing law and jurisdiction

- This Agreement, and any dispute or claim arising out of or in connection with it or its subject matter or formation (including non-contractual disputes or claims), shall be governed by, and construed in accordance with, the law of England and Wales. 27.1
- 27.2 The parties irrevocably agree that the courts of England and Wales shall have exclusive jurisdiction to settle any dispute or claim that arises out of, or in connection with, this Agreement or its subject matter or formation (including non-



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