

NB, NBG, NK, NKG

Fitting the primary seal

Service kit instructions



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1. Fitting primary seals, types Dxxx and Axxx

HJ92N/HJ977
DAQF, DQQE,
DQQV, DQQX,
DQQK

M7N
AQAE, AQAV,
AQQE, AQQV,
AQQX, AQQK



Fig. 1 Primary seal types

TM04 5656 3709 - TM04 5655 3709

Shaft seal

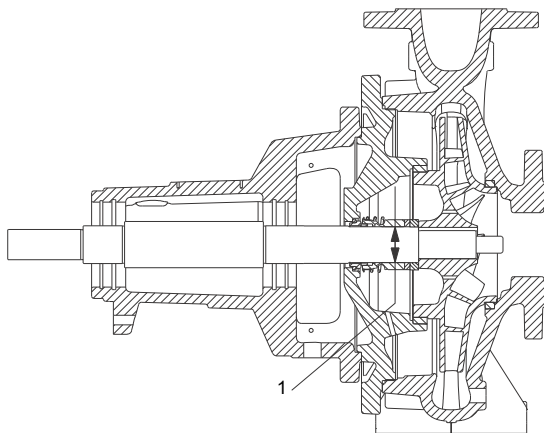


Fig. 2 Shaft seal

TM05 7229 0813

| Pos. | Description | d [mm] |
|------|-----------------------|--------|
| 1 | Shaft seal dimensions | Ø28 |
| | | Ø38 |
| | | Ø48 |
| | | Ø55 |
| | | Ø60 |

1.1 Assembly procedure

1.1.1 Fit the protective sleeve



Fig. 3 Fitting protective sleeve

| Shaft seal diameter | Tool number |
|----------------------------|--------------------|
| D28 | V7216304 |
| D38 | V7216305 |
| D48 | 70007165 |
| D55 | 70007166 |
| D60 | 70007167 |

1.1.2 Fit the shaft seal



Fig. 4 Lubricating shaft with soapy water

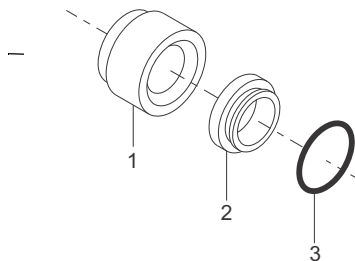


Fig. 5 Shaft seal parts

| Pos. | Description |
|------|-------------------------|
| 1 | Rotating seal face |
| 2 | Stationary seat |
| 3 | O-ring, stationary seat |

TM05 7377 0913

TM05 7278 0913

TM05 7379 0913



Fig. 6 Fitting shaft seal on shaft

1.1.3 Punch for shaft seal



Fig. 7 Punching for shaft seal

TM05 7380 0913

| Shaft seal diameter | Product number, tool |
|---------------------|----------------------|
| D28 | V7216306 |
| D38 | V7216307 |
| D48 | 70007172 |
| D55 | 70007173 |
| D60 | 70007174 |

1.1.4 Spacer ring for primary shaft seal

| Shaft seal diameter | Design | Length [mm] | | Spacer ring* |
|---------------------|----------|-------------|------|-------------------------|
| | | 105b | 105c | Product number |
| D28 | - | - | 7.5 | GG-96520580/MM-96695720 |
| D38 | Design 1 | 15.5 | 10 | GG-96039342/MM-96622403 |
| | Design 2 | - | 10 | GG-95520581/MM-96622404 |
| D48 | - | - | 15 | GG-96622398/MM-96622405 |
| D55 | - | - | 22.5 | GG-96622399/MM-96622406 |
| D60 | - | - | 17.5 | GG-96622401/MM-96622407 |

* **Note:** Spacer ring is NOT displayed in the picture.

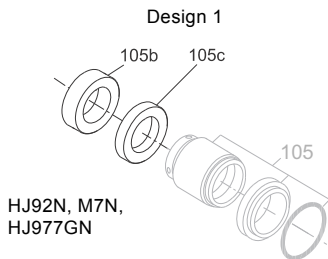


Fig. 8 Spacer for primary shaft seal, design 1

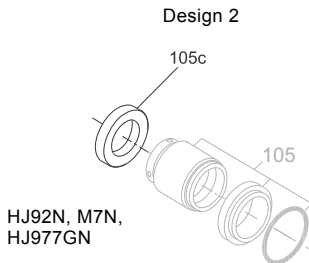


Fig. 9 Spacer for primary shaft seal, design 2

TM04 6801 0910

TM04 6800 0910

38 mm spacer ring

| Pump type | Shaft seal diameter | Design | |
|-----------|---------------------|--------|---|
| 50-32- | 125.1 | - | |
| | 160.1 | - | |
| | 200.1 | - | |
| | 125 | 28 | - |
| | 160 | 28 | - |
| | 200 | 28 | - |
| | 250 | 38 | 2 |
| 65-50- | 125 | 28 | - |
| | 160 | 28 | - |
| 65-40- | 200 | 28 | - |
| | 250 | 38 | 2 |
| | 315 | 38 | 1 |
| 80-65- | 125 | 28 | - |
| | 160 | 28 | - |
| 80-50- | 200 | 28 | - |
| | 250 | 38 | 2 |
| | 315 | 38 | 1 |
| 100-80- | 125 | 28 | - |
| | 160 | 38 | 2 |
| 100-65- | 200 | 38 | 2 |
| | 250 | 38 | 1 |
| | 315 | 48 | - |
| 125-80- | 160 | 38 | 2 |
| | 200 | 38 | 1 |
| | 250 | 38 | 1 |
| | 315 | 48 | - |
| | 400 | 48 | - |
| 125-100- | 160 | 38 | 2 |
| | 200 | 38 | 1 |
| | 250 | 48 | - |
| | 315 | 48 | - |
| | 400 | 48 | - |

| 38 mm spacer ring | | | |
|-------------------|---------------------|--------|---|
| Pump type | Shaft seal diameter | Design | |
| 150-125- | 200 | 38 | 1 |
| | 250 | 48 | - |
| | 315 | 48 | - |
| | 400 | 48 | - |
| | 500 | 60 | - |
| 200-150- | 200 | 38 | 1 |
| | 250 | 48 | - |
| | 315 | 55 | - |
| | 400 | 55 | - |
| | 500 | 60 | - |
| 250-200- | 400 | 48 | - |
| | 450 | 48 | - |
| 300-250- | 350 | 48 | - |
| | 400 | 48 | - |
| | 450 | 60 | - |
| | 500 | 60 | - |

1.1.5 Position the shaft seal and spacer ring



Fig. 10 Positioning tool for primary shaft seal

| Shaft seal diameter | Tool |
|---------------------|----------------|
| | Product number |
| D28 | 97525270 |
| D38 | 97525291 |
| D48 | 97525294 |
| D55 | 97525295 |
| D60 | 97525296 |



Fig. 11 Positioning tool for primary shaft seal

TM05 7384 0913

1.1.6 Tighten the shaft seal (allen screws)



Fig. 12 Tightening shaft seal

| Allen screw | Torque [Nm] |
|-------------|-------------|
| M4 | 2 |
| M5 | 3 |
| M6 | 6 |
| M8 | 12 |

1.1.7 Remove positioning tool



Fig. 13 Removing positioning tool

TM05 7385 0913

TM05 7386 0913

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