

# HİDROLİK ÜRÜN KATALOĞU

**HATTAT**  
OTOMOTİV PAZARLAMA A.Ş.

# İÇİNDEKİLER

<b>ALÜMİNYUM DİŞLİ POMPALAR</b>	<b>7-14</b>
<b>TANDEM POMPALAR</b>	<b>17-20</b>
<b>ALÜMİNYUM GÖVDELİ MOTOR SERİSİ</b>	<b>23</b>
<b>ENDÜSTRİYEL UYGULAMALAR İÇİN DÖKÜM GÖVDELİ POMPALAR</b>	<b>27-28</b>
<b>DÖKÜM GÖVDELİ POMPALAR</b>	<b>31-37</b>
<b>TORK MOTORLARI</b>	<b>41-47</b>
<b>HİDROSTATİK DİREKSİYON ÜNİTELERİ</b>	<b>51</b>
<b>MONOBLOK YÖN KONTROL VALFLERİ</b>	<b>55-56</b>
<b>HİDROLİK GÜÇ ÜNİTELERİ</b>	<b>59-62</b>



# ALÜMİNYUM DİŞLİ POMPALAR

## ALÜMİNYUM DİŞLİ POMPALAR

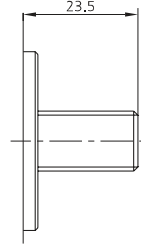
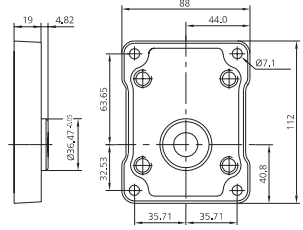






## ALÜMİNYUM DIŞLI POMPALAR

### B KARE KAPAK

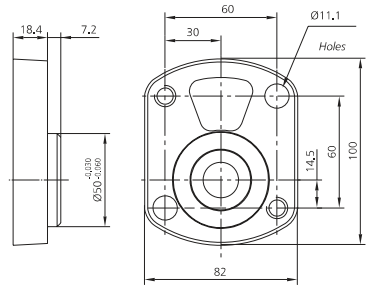


Involute spline  
DIN 5482 B17x14  
9 Teeth

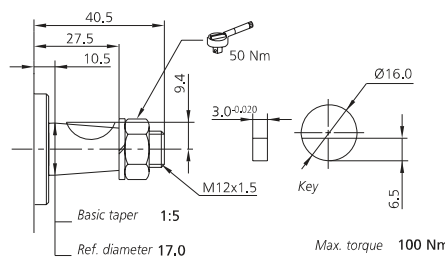
Max. torque 115 Nm

SAAT YÖNÜ TERSİ DÖNÜŞ	SAAT YÖNÜ DÖNÜŞ	İLETİM HACMİ (cm <sup>3</sup> /dev)	ŞAFT TİPİ	KAPAK TİPİ	İŞLETİM BASINCI (bar)	GİRİŞ PORTU	ÇIKIŞ PORTU
1PN039ABS15	1PN039CBS15	3,90	DIN 5482 9 Diş/16,5	B	250	30 - M6*1*13	30 - M6*1*13
1PN060ABS15	1PN060CBS15	6,00	DIN 5482 9 Diş/16,5	B	250	30 - M6*1*13	30 - M6*1*13
1PN082ABS12	1PN082CBS12	8,20	DIN 5482 9 Diş/16,5	B	250	30 - M6*1*13	30 - M6*1*13
1PN095ABS15	1PN095CBS15	9,50	DIN 5482 9 Diş/16,5	B	250	30 - M6*1*13	30 - M6*1*13
1PN119ABS11	1PN119CBS11	11,90	DIN 5482 9 Diş/16,5	B	250	30 - M6*1*13	30 - M6*1*13
1PN140ABS11	1PN140CBS11	14,00	DIN 5482 9 Diş/16,5	B	250	40 - M6*1*13	30 - M6*1*13
1PN168ABS11	1PN168CBS11	16,80	DIN 5482 9 Diş/16,5	B	250	40 - M6*1*13	30 - M6*1*13
1PN192ABS11	1PN192CBS11	19,20	DIN 5482 9 Diş/16,5	B	250	40 - M6*1*13	30 - M6*1*13
1PN229ABS11	1PN229CBS11	22,90	DIN 5482 9 Diş/16,5	B	210	40 - M6*1*13	30 - M6*1*13
1PN281ABS13	1PN281CBS13	28,10	DIN 5482 9 Diş/16,5	B	175	40 - M6*1*13	40 - M6*1*13

### F 2 CİVATALI MERKEZLEME



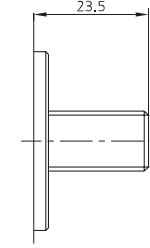
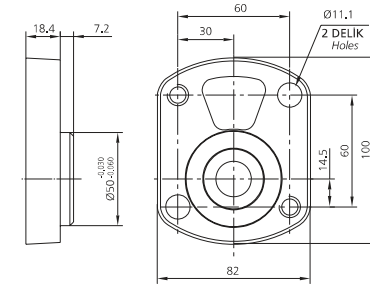
### T KONİK KAMALI ŞAFT 1/5



SAAT YÖNÜ TERSİ DÖNÜŞ	SAAT YÖNÜ DÖNÜŞ	İLETİM HACMİ (cm <sup>3</sup> /dev)	ŞAFT TİPİ	KAPAK TİPİ	İŞLETİM BASINCI (bar)	GİRİŞ PORTU	ÇIKIŞ PORTU
1PN040AFT3	1PN040CFT3	4,00	1/5	F	250	40 - M6*1*13	35 - M6*1*13
1PN061AFT3	1PN061CFT3	6,10	1/5	F	250	40 - M6*1*13	35 - M6*1*13
1PN082AFT3	1PN082CFT3	8,20	1/5	F	250	40 - M6*1*13	35 - M6*1*13
1PN095AFT3	1PN095CFT3	9,50	1/5	F	250	40 - M6*1*13	35 - M6*1*13
1PN119AFT3	1PN119CFT3	11,90	1/5	F	250	40 - M6*1*13	35 - M6*1*13
1PN140AFT3	1PN140CFT3	14,00	1/5	F	250	40 - M6*1*13	35 - M6*1*13
1PN168AFT3	1PN168CFT3	16,80	1/5	F	250	40 - M6*1*13	35 - M6*1*13
1PN192AFT3	1PN192CFT3	19,20	1/5	F	250	40 - M6*1*13	35 - M6*1*13
1PN229AFT3	1PN229CFT3	22,90	1/5	F	210	40 - M6*1*13	35 - M6*1*13
1PN281AFT3	1PN281CFT3	28,10	1/5	F	175	40 - M6*1*13	35 - M6*1*13

## ALÜMİNYUM DIŞLI POMPALAR

### F 2'Lİ CİVATALAMA MONTAJI

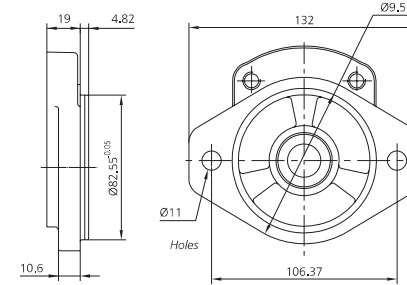


Involute spline  
DIN 5482 B17x14  
9 Teeth

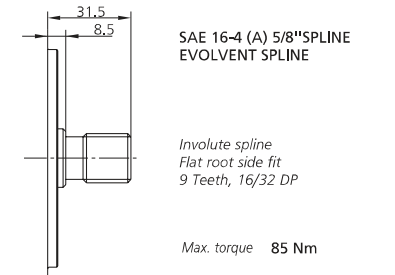
Max. torque 115 Nm

SAAT YÖNÜ TERSİ DÖNÜŞ	SAAT YÖNÜ DÖNÜŞ	İLETİM HACMİ (cm <sup>3</sup> /dev)	ŞAFT TİPİ	KAPAK TİPİ	İŞLETİM BASINCI (bar)	GİRİŞ PORTU	ÇIKIŞ PORTU
1PN040AFS3	1PN040CFS3	4,00	DIN 5482 9 Diş/16,5	F	250	40 - M6*1*13	35 - M6*1*13
1PN061AFS3	1PN061CFS3	6,10	DIN 5482 9 Diş/16,5	F	250	40 - M6*1*13	35 - M6*1*13
1PN082AFS3	1PN082CFS3	8,20	DIN 5482 9 Diş/16,5	F	250	40 - M6*1*13	35 - M6*1*13
1PN095AFS3	1PN095CFS3	9,50	DIN 5482 9 Diş/16,5	F	250	40 - M6*1*13	35 - M6*1*13
1PN119AFS3	1PN119CFS3	11,90	DIN 5482 9 Diş/16,5	F	250	40 - M6*1*13	35 - M6*1*13
1PN140AFS3	1PN140CFS3	14,00	DIN 5482 9 Diş/16,5	F	250	40 - M6*1*13	35 - M6*1*13
1PN168AFS3	1PN168CFS3	16,80	DIN 5482 9 Diş/16,5	F	250	40 - M6*1*13	35 - M6*1*13
1PN229AFS3	1PN229CFS3	22,90	DIN 5482 9 Diş/16,5	F	210	40 - M6*1*13	35 - M6*1*13
1PN281AFS3	1PN281CFS3	28,10	DIN 5482 9 Diş/16,5	F	175	40 - M6*1*13	35 - M6*1*13

### G 2 CİVATALI MERKEZLEME



### S SAE SPLINE ŞAFT (SAE J 744 16-4 9 T)

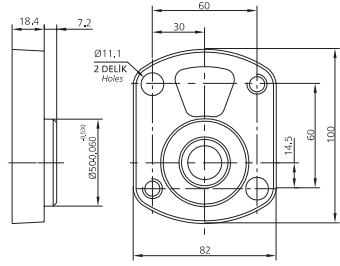


SAAT YÖNÜ TERSİ DÖNÜŞ	SAAT YÖNÜ DÖNÜŞ	İLETİM HACMİ (cm <sup>3</sup> /dev)	ŞAFT TİPİ	KAPAK TİPİ	İŞLETİM BASINCI (bar)	GİRİŞ PORTU	ÇIKIŞ PORTU
1PN040AGS3	1PN040CGS3	4,00	SAE 16-4 9 Diş/15,5	G SAE A	250	40 - M6*1*13	35 - M6*1*13
1PN061AGS3	1PN061CGS3	6,10	SAE 16-4 9 Diş/15,5	G SAE A	250	40 - M6*1*13	35 - M6*1*13
1PN082AGS3	1PN082CGS3	8,20	SAE 16-4 9 Diş/15,5	G SAE A	250	40 - M6*1*13	35 - M6*1*13
1PN095AGS3	1PN095CGS3	9,50	SAE 16-4 9 Diş/15,5	G SAE A	250	40 - M6*1*13	35 - M6*1*13
1PN119AGS3	1PN119CGS3	11,90	SAE 16-4 9 Diş/15,5	G SAE A	250	40 - M6*1*13	35 - M6*1*13
1PN140AGS3	1PN140CGS3	14,00	SAE 16-4 9 Diş/15,5	G SAE A	250	40 - M6*1*13	35 - M6*1*13
1PN168AGS3	1PN168CGS3	16,80	SAE 16-4 9 Diş/15,5	G SAE A	250	40 - M6*1*13	35 - M6*1*13
1PN192AGS3	1PN192CGS3	19,20	SAE 16-4 9 Diş/15,5	G SAE A	250	40 - M6*1*13	35 - M6*1*13
1PN229AGS3	1PN229CGS3	22,90	SAE 16-4 9 Diş/15,5	G SAE A	210	40 - M6*1*13	35 - M6*1*13
1PN281AGS3	1PN281CGS3	28,10	SAE 16-4 9 Diş/15,5	G SAE A	175	40 - M6*1*13	35 - M6*1*13

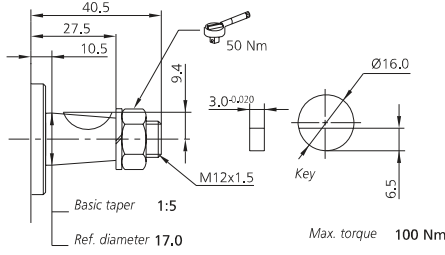


## ALÜMİNYUM DIŞLI POMPALAR

### J CİVATA MONTAJI



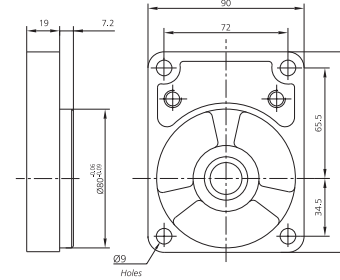
### T KONİK KAMALI ŞAFT 1/5



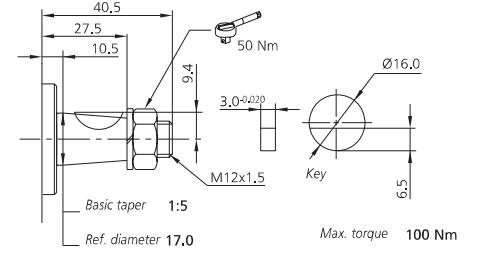
SAAT YÖNÜ TERSİ DÖNÜŞ	SAAT YÖNÜ DÖNÜŞ	İLETİM HACMİ (cm <sup>3</sup> /dev)	ŞAFT TİPİ	KAPAK TİPİ	İŞLETİM BASINCI (bar)	GİRİŞ PORTU	ÇIKIŞ PORTU
1PN.040.AJT3	1PN.040.CJT3	4,00	1/5	J	250	40 - M6*1*13	35 - M6*1*13
1PN.061.AJT3	1PN.061.CJT3	6,10	1/5	J	250	40 - M6*1*13	35 - M6*1*13
1PN.082.AJT3	1PN.082.CJT3	8,20	1/5	J	250	40 - M6*1*13	35 - M6*1*13
1PN.095.AJT3	1PN.095.CJT3	9,50	1/5	J	250	40 - M6*1*13	35 - M6*1*13
1PN.119.AJT3	1PN.119.CJT3	11,90	1/5	J	250	40 - M6*1*13	35 - M6*1*13
1PN.140.AJT3	1PN.140.CJT3	14,00	1/5	J	250	40 - M6*1*13	35 - M6*1*13
1PN.168.AJT3	1PN.168.CJT3	16,80	1/5	J	250	40 - M6*1*13	35 - M6*1*13
1PN.192.AJT3	1PN.192.CJT3	19,20	1/5	J	250	40 - M6*1*13	35 - M6*1*13
1PN.229.AJT3	1PN.229.CJT3	22,90	1/5	J	210	40 - M6*1*13	35 - M6*1*13
1PN.281.AJT3	1PN.281.CJT3	28,10	1/5	J	175	40 - M6*1*13	35 - M6*1*13

## ALÜMİNYUM DIŞLI POMPALAR

### S MERKEZLEME

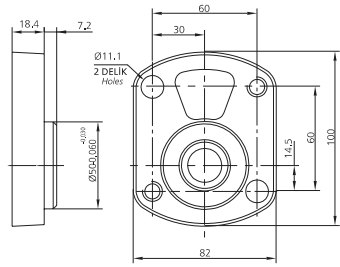


### T KONİK KAMALI ŞAFT 1/5

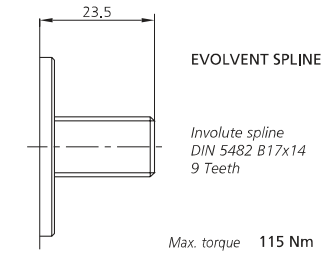


SAAT YÖNÜ TERSİ DÖNÜŞ	SAAT YÖNÜ DÖNÜŞ	İLETİM HACMİ (cm <sup>3</sup> /dev)	ŞAFT TİPİ	KAPAK TİPİ	İŞLETİM BASINCI (bar)	GİRİŞ PORTU	ÇIKIŞ PORTU
1PN040AST3	1PN040CST3	4,00	1/5	S	250	40 - M6*1*13	35 - M6*1*13
1PN061AST3	1PN061CST3	6,10	1/5	S	250	40 - M6*1*13	35 - M6*1*13
1PN082AST3	1PN082CST3	8,20	1/5	S	250	40 - M6*1*13	35 - M6*1*13
1PN095AST3	1PN095CST3	9,50	1/5	S	250	40 - M6*1*13	35 - M6*1*13
1PN119AST3	1PN119CST3	11,90	1/5	S	250	40 - M6*1*13	35 - M6*1*13
1PN140AST3	1PN140CST3	14,00	1/5	S	250	40 - M6*1*13	35 - M6*1*13
1PN168AST3	1PN168CST3	16,80	1/5	S	250	40 - M6*1*13	35 - M6*1*13
1PN168AST3	1PN168CST3	16,80	1/5	S	250	40 - M6*1*13	35 - M6*1*13
1PN192AST3	1PN192CST3	19,20	1/5	S	250	40 - M6*1*13	35 - M6*1*13
1PN229AST3	1PN229CST3	22,90	1/5	S	210	40 - M6*1*13	35 - M6*1*13
1PN281AST3	1PN281CST3	28,10	1/5	S	175	40 - M6*1*13	35 - M6*1*13

### J 2 CİVATALI MERKEZLEME

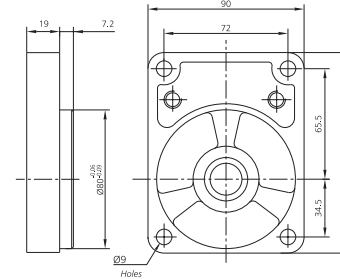


### S ŞAFT DIŞI

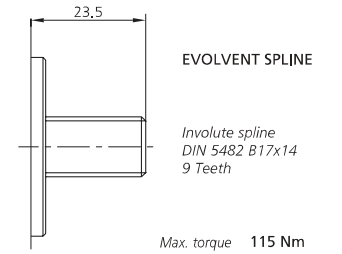


SAAT YÖNÜ TERSİ DÖNÜŞ	SAAT YÖNÜ DÖNÜŞ	İLETİM HACMİ (cm <sup>3</sup> /dev)	ŞAFT TİPİ	KAPAK TİPİ	İŞLETİM BASINCI (bar)	GİRİŞ PORTU	ÇIKIŞ PORTU
1PN040AJS3	1PN040CJS3	4,00	DIN 5482 9 Diş/16,5	J	250	40 - M6*1*13	35 - M6*1*13
1PN061AJS3	1PN061CJS3	6,10	DIN 5482 9 Diş/16,5	J	250	40 - M6*1*13	35 - M6*1*13
1PN082AJS3	1PN082CJS3	8,20	DIN 5482 9 Diş/16,5	J	250	40 - M6*1*13	35 - M6*1*13
1PN095AJS3	1PN095CJS3	9,50	DIN 5482 9 Diş/16,5	J	250	40 - M6*1*13	35 - M6*1*13
1PN119AJS3	1PN119CJS3	11,90	DIN 5482 9 Diş/16,5	J	250	40 - M6*1*13	35 - M6*1*13
1PN140AJS3	1PN140CJS3	14,00	DIN 5482 9 Diş/16,5	J	250	40 - M6*1*13	35 - M6*1*13
1PN168AJS3	1PN168CJS3	16,80	DIN 5482 9 Diş/16,5	J	250	40 - M6*1*13	35 - M6*1*13
1PN192AJS3	1PN192CJS3	19,20	DIN 5482 9 Diş/16,5	J	250	40 - M6*1*13	35 - M6*1*13
1PN229AJS3	1PN229CJS3	22,90	DIN 5482 9 Diş/16,5	J	210	40 - M6*1*13	35 - M6*1*13
1PN281AJS3	1PN281CJS3	28,10	DIN 5482 9 Diş/16,5	J	175	40 - M6*1*13	35 - M6*1*13

### S MERKEZLEME



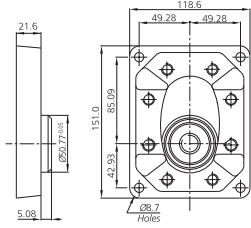
### S ŞAFT DIŞI



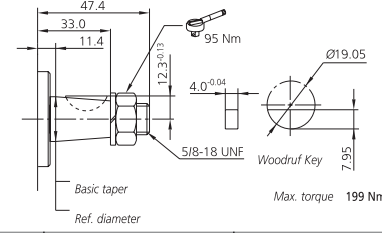
SAAT YÖNÜ TERSİ DÖNÜŞ	SAAT YÖNÜ DÖNÜŞ	İLETİM HACMİ (cm <sup>3</sup> /dev)	ŞAFT TİPİ	KAPAK TİPİ	İŞLETİM BASINCI (bar)	GİRİŞ PORTU	ÇIKIŞ PORTU
1PN040ASS3	1PN040CSS3	4,00	DIN 5482 9 Diş/16,5	S	250	40 - M6*1*13	35 - M6*1*13
1PN061ASS3	1PN061CSS3	6,10	DIN 5482 9 Diş/16,5	S	250	40 - M6*1*13	35 - M6*1*13
1PN082ASS3	1PN082CSS3	8,20	DIN 5482 9 Diş/16,5	S	250	40 - M6*1*13	35 - M6*1*13
1PN095ASS3	1PN095CSS3	9,50	DIN 5482 9 Diş/16,5	S	250	40 - M6*1*13	35 - M6*1*13
1PN119ASS3	1PN119CSS3	11,90	DIN 5482 9 Diş/16,5	S	250	40 - M6*1*13	35 - M6*1*13
1PN140ASS3	1PN140CSS3	14,00	DIN 5482 9 Diş/16,5	S	250	40 - M6*1*13	35 - M6*1*13
1PN168ASS3	1PN168CSS3	16,80	DIN 5482 9 Diş/16,5	S	250	40 - M6*1*13	35 - M6*1*13
1PN192ASS3	1PN192CSS3	19,20	DIN 5482 9 Diş/16,5	S	250	40 - M6*1*13	35 - M6*1*13
1PN192AFS3	1PN192AFS3	19,20	DIN 5482 9 Diş/16,5	S	250	40 - M6*1*13	35 - M6*1*13
1PN229ASS3	1PN229CSS3	22,90	DIN 5482 9 Diş/16,5	S	210	40 - M6*1*13	35 - M6*1*13
1PN281ASS3	1PN281CSS3	28,10	DIN 5482 9 Diş/16,5	S	175	40 - M6*1*13	35 - M6*1*13

## ALÜMİNYUM DIŞLI POMPALAR

### B KARE KAPAK

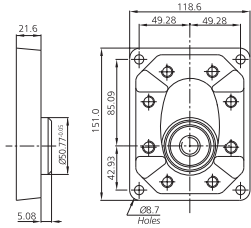


### T KONİK KAMALI ŞAFT 1/8

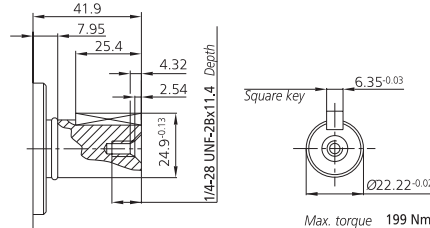


SAAT YÖNÜ TERSİ DÖNÜŞ	SAAT YÖNÜ DÖNÜŞ	İLETİM HACMİ (cm <sup>3</sup> /dev)	ŞAFT TİPİ	KAPAK TİPİ	İŞLETİM BASINCI (bar)	GİRİŞ PORTU	ÇIKIŞ PORTU
2P13070AB7	2P13070CB7	22,70	1/8	B	250	51 - M10*1,5*13	40 - M8*1,25*13
2P13090AB7	2P13090CB7	28,80	1/8	B	250	51 - M10*1,5*13	40 - M8*1,25*13
2P1.3105.AB7	2P1.3105.CB7	33,30	1/8	B	250	51 - M10*1,5*13	40 - M8*1,25*13
2P1.3120.AB7	2P1.3120.CB7	37,80	1/8	B	210	51 - M10*1,5*13	40 - M8*1,25*13
2P1.3135.AB7	2P1.3135.CB7	42,60	1/8	B	210	51 - M10*1,5*13	40 - M8*1,25*13
2P13146AB7	2P13146CB7	45,40	1/8	B	210	51 - M10*1,5*13	40 - M8*1,25*13
2P1.3158SAB7	2P1.3158SAB7	49,40	1/8	B	210	51 - M10*1,5*13	40 - M8*1,25*13
2P1.3180SAB7	2P1.3180SAB7	56,10	1/8	B	175	51 - M10*1,5*13	40 - M8*1,25*13

### B KARE KAPAK



### P PARALEL ŞAFT



SAAT YÖNÜ TERSİ DÖNÜŞ	SAAT YÖNÜ DÖNÜŞ	İLETİM HACMİ (cm <sup>3</sup> /dev)	ŞAFT TİPİ	KAPAK TİPİ	İŞLETİM BASINCI (bar)	GİRİŞ PORTU	ÇIKIŞ PORTU
2P1.3105SABP1	2P1.3105SCBP1	33,30	P	B	250	48 - M8*1,25*13	48 - M8*1,25*13
2P1.3120SABP1	2P1.3120SCBP1	37,80	P	B	210	48 - M8*1,25*13	48 - M8*1,25*13
2P1.3135SABP1	2P1.3135SCBP1	42,60	P	B	210	48 - M8*1,25*13	48 - M8*1,25*13
2P1.3146SABP1	2P1.3146SCBP1	45,40	P	B	210	48 - M8*1,25*13	48 - M8*1,25*13
2P1.3158SABP1	2P1.3158SCBP1	49,40	P	B	210	48 - M8*1,25*13	48 - M8*1,25*13
2P1.3180SABP1	2P1.3180SCBP1	56,10	P	B	175	48 - M8*1,25*13	48 - M8*1,25*13

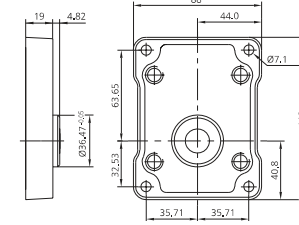
SAAT YÖNÜ TERSİ DÖNÜŞ	SAAT YÖNÜ DÖNÜŞ	İLETİM HACMİ (cm <sup>3</sup> /dev)	ŞAFT TİPİ	KAPAK TİPİ	İŞLETİM BASINCI (bar)	GİRİŞ PORTU	ÇIKIŞ PORTU
3P1.4150SABP	3P1.4150SCBP	47,00	P	B	248	69,85*35,71 - M12*1,75*30	52,32*26,21 - M10*1,5*30
3P1.4180SABP	3P1.4180SCBP	56,10	P	B	248	69,85*35,71 - M12*1,75*30	52,32*26,21 - M10*1,5*30
3P1.4210SABP	3P1.4210SCBP	65,10	P	B	248	69,85*35,71 - M12*1,75*30	52,32*26,21 - M10*1,5*30
3P1.4250SABP	3P1.4250SCBP	77,00	P	B	248	69,85*35,71 - M12*1,75*30	52,32*26,21 - M10*1,5*30
3P1.4300SABP	3P1.4300SCBP	91,90	P	B	207	69,85*35,71 - M12*1,75*30	52,32*26,21 - M10*1,5*30
3P1.4330SABP	3P1.4330SCBP	101,50	P	B	193	69,85*35,71 - M12*1,75*30	52,32*26,21 - M10*1,5*30
3P1.4380SABP	3P1.4380SCBP	116,70	P	B	172	69,85*35,71 - M12*1,75*30	52,32*26,21 - M10*1,5*30

# TANDEM POMPALAR

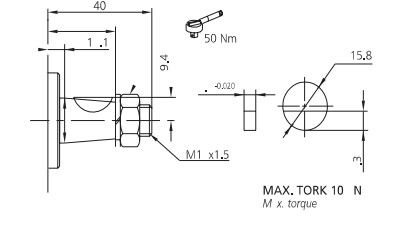
# TANDEM POMPALAR

## TANDEM POMPALAR

### B KARE KAPAK



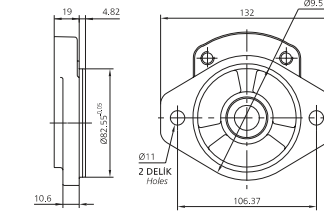
### T KONİK KAMALI ŞAFT 1/8



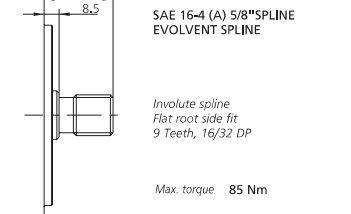
#### Ön Pompa

SAAT YÖNÜ TERSİ DÖNÜŞ	SAAT YÖNÜ DÖNÜŞ	İLETİM HACMİ (cm <sup>3</sup> /dev)	ŞAFT TİPİ	KAPAK TİPİ	İŞLETİM BASINCI (bar)	GİRİŞ PORTU	ÇIKIŞ PORTU
F1PN040AB12	F1PN040CB12	4,00	1/8	B	250	30 - M6*1*13	30 - M6*1*13
F1PN061AB12	F1PN061CB12	6,10	1/8	B	250	30 - M6*1*13	30 - M6*1*13
F1PN082AB12	F1PN082CB12	8,20	1/8	B	250	30 - M6*1*13	30 - M6*1*13
F1PN095AB12	F1PN095CB12	9,50	1/8	B	250	30 - M6*1*13	30 - M6*1*13
F1PN119AB11	F1PN119CB11	11,90	1/8	B	250	40 - M6*1*13	30 - M6*1*13
F1PN140AB11	F1PN140CB11	14,00	1/8	B	250	40 - M6*1*13	30 - M6*1*13
F1PN168AB11	F1PN168CB11	16,80	1/8	B	250	40 - M6*1*13	30 - M6*1*13
F1PN192AB11	F1PN192CB11	19,20	1/8	B	250	40 - M6*1*13	30 - M6*1*13
F1PN229AB11	F1PN229CB11	22,90	1/8	B	210	40 - M6*1*13	30 - M6*1*13
F1PN281AB13	F1PN281CB13	28,10	1/8	B	175	40 - M6*1*13	40 - M6*1*13

### G 2 CİVATALI MERKEZLEME



### S SAE SPLINE ŞAFT (SAE J 744 16-4 9 T)



#### Ön Pompa

SAAT YÖNÜ TERSİ DÖNÜŞ	SAAT YÖNÜ DÖNÜŞ	İLETİM HACMİ (cm <sup>3</sup> /dev)	ŞAFT TİPİ	KAPAK TİPİ	İŞLETİM BASINCI (bar)	GİRİŞ PORTU	ÇIKIŞ PORTU
F1PN040AGS3	F1PN040CGS3	4,00	SAE 16-4 9 Diş/15,5	G SAE A	250	40 - M6*1*13	35 - M6*1*13
F1PN061AGS3	F1PN061CGS3	6,10	SAE 16-4 9 Diş/15,5	G SAE A	250	40 - M6*1*13	35 - M6*1*13
F1PN082AGS3	F1PN082CGS3	8,20	SAE 16-4 9 Diş/15,5	G SAE A	250	40 - M6*1*13	35 - M6*1*13
F1PN095AGS3	F1PN095CGS3	9,50	SAE 16-4 9 Diş/15,5	G SAE A	250	40 - M6*1*13	35 - M6*1*13
F1PN119AGS3	F1PN119CGS3	11,90	SAE 16-4 9 Diş/15,5	G SAE A	250	40 - M6*1*13	35 - M6*1*13
F1PN140AGS3	F1PN140CGS3	14,00	SAE 16-4 9 Diş/15,5	G SAE A	250	40 - M6*1*13	35 - M6*1*13
F1PN168AGS3	F1PN168CGS3	16,80	SAE 16-4 9 Diş/15,5	G SAE A	250	40 - M6*1*13	35 - M6*1*13
F1PN192AGS3	F1PN192CGS3	19,20	SAE 16-4 9 Diş/15,5	G SAE A	250	40 - M6*1*13	35 - M6*1*13
F1PN229AGS3	F1PN229CGS3	22,90	SAE 16-4 9 Diş/15,5	G SAE A	210	40 - M6*1*13	35 - M6*1*13
F1PN281AGS3	F1PN281CGS3	28,10	SAE 16-4 9 Diş/15,5	G SAE A	175	40 - M6*1*13	35 - M6*1*13





## TANDEM POMPALAR

### Arka Pompa

SAAT YÖNÜ TERSİ DÖNÜŞ	SAAT YÖNÜ DÖNÜŞ	İLETİM HACMİ (cm <sup>3</sup> /dev)	ŞAFT TİPİ	KAPAK TİPİ	İŞLETİM BASINCI (bar)	GİRİŞ PORTU	ÇIKIŞ PORTU
R1PN040AX12	R1PN040CX12	4,00	SAE 14 Diş	X	250	30 - M6*1*13	30 - M6*1*13
R1PN061AX12	R1PN061CX12	6,10	SAE 14 Diş	X	250	30 - M6*1*13	30 - M6*1*13
R1PN082AX12	R1PN082CX12	8,20	SAE 14 Diş	X	250	30 - M6*1*13	30 - M6*1*13
R1PN095AX12	R1PN095CX12	9,50	SAE 14 Diş	X	250	30 - M6*1*13	30 - M6*1*13
R1PN119AX11	R1PN119CX11	11,90	SAE 14 Diş	X	250	40 - M6*1*13	30 - M6*1*13
R1PN140AX11	R1PN140CX11	14,00	SAE 14 Diş	X	250	40 - M6*1*13	30 - M6*1*13
R1PN168AX11	R1PN168CX11	16,80	SAE 14 Diş	X	250	40 - M6*1*13	30 - M6*1*13
R1PN192AX11	R1PN192CX11	19,20	SAE 14 Diş	X	250	40 - M6*1*13	30 - M6*1*13
R1PN229AX11	R1PN229CX11	22,90	SAE 14 Diş	X	210	40 - M6*1*13	30 - M6*1*13
R1PN281AX13	R1PN281CX13	28,10	SAE 14 Diş	X	175	40 - M6*1*13	40 - M6*1*13
R1PN040AX3	R1PN040CX3	4,00	SAE 14 Diş	X	250	40 - M6*1*13	35 - M6*1*13
R1PN061AX3	R1PN061CX3	6,10	SAE 14 Diş	X	250	40 - M6*1*13	35 - M6*1*13
R1PN082AX3	R1PN082CX3	8,20	SAE 14 Diş	X	250	40 - M6*1*13	35 - M6*1*13
R1PN095AX3	R1PN095CX3	9,50	SAE 14 Diş	X	250	40 - M6*1*13	35 - M6*1*13
R1PN119AX3	R1PN119CX3	11,90	SAE 14 Diş	X	250	40 - M6*1*13	35 - M6*1*13
R1PN140AX3	R1PN140CX3	14,00	SAE 14 Diş	X	250	40 - M6*1*13	35 - M6*1*13
R1PN168AX3	R1PN168CX3	16,80	SAE 14 Diş	X	250	40 - M6*1*13	35 - M6*1*13
R1PN192AX3	R1PN192CX3	19,20	SAE 14 Diş	X	250	40 - M6*1*13	35 - M6*1*13
R1PN229AX3	R1PN229CX3	22,90	SAE 14 Diş	X	210	40 - M6*1*13	35 - M6*1*13
R1PN281AX3	R1PN281CX3	28,10	SAE 14 Diş	X	175	40 - M6*1*13	35 - M6*1*13

### Ara Pompa

SAAT YÖNÜ TERSİ DÖNÜŞ	SAAT YÖNÜ DÖNÜŞ	İLETİM HACMİ (cm <sup>3</sup> /dev)	ŞAFT TİPİ	KAPAK TİPİ	İŞLETİM BASINCI (bar)	GİRİŞ PORTU	ÇIKIŞ PORTU
T1PN040AX12	T1PN040CX12	4,00	SAE 14 Diş	X	250	30 - M6*1*13	30 - M6*1*13
T1PN061AX12	T1PN061CX12	6,10	SAE 14 Diş	X	250	30 - M6*1*13	30 - M6*1*13
T1PN082AX12	T1PN082CX12	8,20	SAE 14 Diş	X	250	30 - M6*1*13	30 - M6*1*13
T1PN095AX12	T1PN095CX12	9,50	SAE 14 Diş	X	250	30 - M6*1*13	30 - M6*1*13
T1PN119AX11	T1PN119CX11	11,90	SAE 14 Diş	X	250	40 - M6*1*13	30 - M6*1*13
T1PN140AX11	T1PN140CX11	14,00	SAE 14 Diş	X	250	40 - M6*1*13	30 - M6*1*13
T1PN168AX11	T1PN168CX11	16,80	SAE 14 Diş	X	250	40 - M6*1*13	30 - M6*1*13
T1PN192AX11	T1PN192CX11	19,20	SAE 14 Diş	X	250	40 - M6*1*13	30 - M6*1*13
T1PN229AX11	T1PN229CX11	22,90	SAE 14 Diş	X	210	40 - M6*1*13	30 - M6*1*13
T1PN281AX13	T1PN281CX13	28,10	SAE 14 Diş	X	175	40 - M6*1*13	40 - M6*1*13
T1PN040AX3	T1PN040CX3	4,00	SAE 14 Diş	X	250	40 - M6*1*13	35 - M6*1*13
T1PN061AX3	T1PN061CX3	6,10	SAE 14 Diş	X	250	40 - M6*1*13	35 - M6*1*13
T1PN082AX3	T1PN082CX3	8,20	SAE 14 Diş	X	250	40 - M6*1*13	35 - M6*1*13
T1PN095AX3	T1PN095CX3	9,50	SAE 14 Diş	X	250	40 - M6*1*13	35 - M6*1*13
T1PN119AX3	T1PN119CX3	11,90	SAE 14 Diş	X	250	40 - M6*1*13	35 - M6*1*13
T1PN140AX3	T1PN140CX3	14,00	SAE 14 Diş	X	250	40 - M6*1*13	35 - M6*1*13
T1PN168AX3	T1PN168CX3	16,80	SAE 14 Diş	X	250	40 - M6*1*13	35 - M6*1*13
T1PN192AX3	T1PN192CX3	19,20	SAE 14 Diş	X	250	40 - M6*1*13	35 - M6*1*13
T1PN229AX3	T1PN229CX3	22,90	SAE 14 Diş	X	210	40 - M6*1*13	35 - M6*1*13
T1PN281AX3	T1PN281CX3	28,10	SAE 14 Diş	X	175	40 - M6*1*13	35 - M6*1*13

ALÜMİNYUM  
GÖVDELI  
MOTOR SERİSİ

ALÜMİNYUM  
GÖVDELI  
MOTOR SERİSİ



## 1 MN GRUBU ALÜMİNYUM GÖVDELİ MOTOR SERİLERİ

MALZEME	İLETİM HACMİ (cm <sup>3</sup> /dev)	ŞAFT TİPİ	KAPAK	ÇALIŞMA BASINCI (bar)	GİRİŞ PORTU	ÇIKIŞ PORTU
1MN061001M	6,10	1/8	B	250	30 - M6*4	30 - M6*4
1MN082001M	8,20	1/8	B	250	30 - M6*4	30 - M6*4
1MN095001M	9,50	1/8	B	250	30 - M6*4	30 - M6*4
1MN105001M	10,50	1/8	B	250	30 - M6*4	30 - M6*4
1MN119001M	11,90	1/8	B	250	30 - M6*4	30 - M6*4
1MN126001M	12,60	1/8	B	250	30 - M6*4	30 - M6*4
1MN140001M	14,00	1/8	B	250	30 - M6*4	30 - M6*4
1MN168001M	16,80	1/8	B	250	30 - M6*4	30 - M6*4
1MN192001M	19,20	1/8	B	220	40 - M8*4	40 - M8*4
1MN229001M	22,90	1/8	B	200	40 - M8*4	40 - M8*4
1MN260001M	26,00	1/8	B	180	40 - M8*4	40 - M8*4
1MN061002M	6,10	1/5	B	250	30 - M6*4	30 - M6*4
1MN082002M	8,20	1/5	B	250	30 - M6*4	30 - M6*4
1MN095002M	9,50	1/5	B	250	30 - M6*4	30 - M6*4
1MN105002M	10,50	1/5	B	250	30 - M6*4	30 - M6*4
1MN119002M	11,90	1/5	B	250	30 - M6*4	30 - M6*4
1MN126002M	12,60	1/5	B	250	30 - M6*4	30 - M6*4
1MN140002M	14,00	1/5	B	250	30 - M6*4	30 - M6*4
1MN168002M	16,80	1/5	B	250	30 - M6*4	30 - M6*4
1MN192002M	19,20	1/5	B	220	40 - M8*4	40 - M8*4
1MN229002M	22,90	1/5	B	200	40 - M8*4	40 - M8*4
1MN260002M	26,00	1/5	B	180	40 - M8*4	40 - M8*4
1MN061003M	6,10	1/5	S	250	30 - M6*4	30 - M6*4
1MN082003M	8,20	1/5	S	250	30 - M6*4	30 - M6*4
1MN095003M	9,50	1/5	S	250	30 - M6*4	30 - M6*4
1MN105003M	10,50	1/5	S	250	30 - M6*4	30 - M6*4
1MN119003M	11,90	1/5	S	250	30 - M6*4	30 - M6*4
1MN126003M	12,60	1/5	S	250	30 - M6*4	30 - M6*4
1MN140003M	14,00	1/5	S	250	30 - M6*4	30 - M6*4
1MN168003M	16,80	1/5	S	250	30 - M6*4	30 - M6*4
1MN192003M	19,20	1/5	S	220	40 - M8*4	40 - M8*4
1MN229003M	22,90	1/5	S	200	40 - M8*4	40 - M8*4
1MN260003M	26,00	1/5	S	180	40 - M8*4	40 - M8*4
1MN061004M	6,10	SAE 16-4 9 Diş/15,5	G SAE A	250	SAE 10 7/8-14 UNF	SAE 10 7/8-14 UNF
1MN082004M	8,20	SAE 16-4 9 Diş/15,5	G SAE A	250	SAE 10 7/8-14 UNF	SAE 10 7/8-14 UNF
1MN095004M	9,50	SAE 16-4 9 Diş/15,5	G SAE A	250	SAE 10 7/8-14 UNF	SAE 10 7/8-14 UNF
1MN105004M	10,50	SAE 16-4 9 Diş/15,5	G SAE A	250	SAE 10 7/8-14 UNF	SAE 10 7/8-14 UNF
1MN119004M	11,90	SAE 16-4 9 Diş/15,5	G SAE A	250	SAE 10 7/8-14 UNF	SAE 10 7/8-14 UNF
1MN126004M	12,60	SAE 16-4 9 Diş/15,5	G SAE A	250	SAE 10 7/8-14 UNF	SAE 10 7/8-14 UNF
1MN140004M	14,00	SAE 16-4 9 Diş/15,5	G SAE A	250	SAE 10 7/8-14 UNF	SAE 10 7/8-14 UNF
1MN168004M	16,80	SAE 16-4 9 Diş/15,5	G SAE A	250	SAE 10 7/8-14 UNF	SAE 10 7/8-14 UNF
1MN192004M	19,20	SAE 16-4 9 Diş/15,5	G SAE A	220	SAE 12 1/1-16 UNF	SAE 12 1/1-16 UNF
1MN229004M	22,90	SAE 16-4 9 Diş/15,5	G SAE A	200	SAE 12 1/1-16 UNF	SAE 12 1/1-16 UNF
1MN260004M	26,00	SAE 16-4 9 Diş/15,5	G SAE A	180	SAE 12 1/1-16 UNF	SAE 12 1/1-16 UNF



ENDÜSTRİYEL  
UYGULAMALAR İÇİN  
DÖKÜM GÖVDELİ  
POMPALAR

ENDÜSTRİYEL  
UYGULAMALAR İÇİN  
DÖKÜM GÖVDELİ  
POMPALAR

## ENDÜSTRİYEL UYGULAMALAR İÇİN DÖKÜM GÖVDELİ POMPALAR

### B Tipi Kapak – 1:8 Konik Şaft

POMPA TİPİ		İLETİM HACMİ (cm <sup>3</sup> /dev)	ÇALIŞMA BASINCI (bar)	ANİ BASINÇ (bar)	MIN/MAX DEVİR (dev/dk)	GİRİŞ PORTU	ÇIKIŞ PORTU
Saat Yönü Ters Dönüş	Saat Yönü Dönüş						
HPR41086	HPR41087	16	250	280	450/3000	51-M10*1,5*13	40-M8*1,25*13
HPR41088	HPR41089	19	250	280	450/3000	51-M10*1,5*13	40-M8*1,25*13
HPR41090	HPR41091	23	250	280	450/3000	51-M10*1,5*13	40-M8*1,25*13
HPR41092	HPR41093	27	250	280	450/3000	51-M10*1,5*13	40-M8*1,25*13
HPR41094	HPR41095	32	250	280	450/3000	51-M10*1,5*13	40-M8*1,25*13
HPR41096	HPR41097	38	250	280	450/3000	51-M10*1,5*13	40-M8*1,25*13
HPR41098	HPR41099	41	250	280	450/3000	51-M10*1,5*13	40-M8*1,25*13
HPR41100	HPR41101	45	250	280	450/3000	51-M10*1,5*13	40-M8*1,25*13
HPR41102	HPR41103	53	210	235	450/3000	51-M10*1,5*13	40-M8*1,25*13
HPR41104	HPR41105	60	180	200	450/3000	51-M10*1,5*13	40-M8*1,25*13

### SAE A Kapak 5/8" -9 Diş Spline

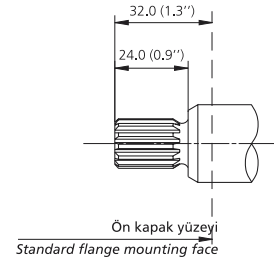
POMPA TİPİ		İLETİM HACMİ (cm <sup>3</sup> /dev)	ÇALIŞMA BASINCI (bar)	ANİ BASINÇ (bar)	MIN/MAX DEVİR (dev/dk)	GİRİŞ PORTU	ÇIKIŞ PORTU
Saat Yönü Ters Dönüş	Saat Yönü Dönüş						
HPR41108	HPR41109	19	250	280	450/3000	51-M10*1,5*13	40-M8*1,25*13
HPR41110	HPR41111	23	250	280	450/3000	51-M10*1,5*13	40-M8*1,25*13
HPR41112	HPR41113	27	250	280	450/3000	51-M10*1,5*13	40-M8*1,25*13
HPR41114	HPR41115	32	250	280	450/3000	51-M10*1,5*13	40-M8*1,25*13
HPR41116	HPR41117	38	250	280	450/3000	51-M10*1,5*13	40-M8*1,25*13
HPR41118	HPR41119	41	250	280	450/3000	51-M10*1,5*13	40-M8*1,25*13
HPR41120	HPR41121	45	250	280	450/3000	51-M10*1,5*13	40-M8*1,25*13
HPR41122	HPR41123	53	210	235	450/3000	51-M10*1,5*13	40-M8*1,25*13
HPR41124	HPR41125	60	180	200	450/3000	51-M10*1,5*13	40-M8*1,25*13

### SAE B Kapak 7/8"-13 Diş Spline

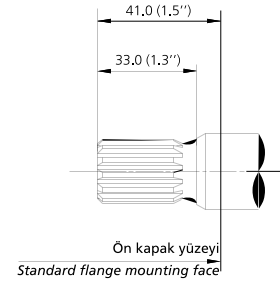
POMPA TİPİ		İLETİM HACMİ (cm <sup>3</sup> /dev)	ÇALIŞMA BASINCI (bar)	ANİ BASINÇ (bar)	MIN/MAX DEVİR (dev/dk)	GİRİŞ PORTU	ÇIKIŞ PORTU
Saat Yönü Ters Dönüş	Saat Yönü Dönüş						
HPR41128	HPR41129	19	250	280	450/3000	51-M10*1,5*13	40-M8*1,25*13
HPR41130	HPR41131	23	250	280	450/3000	51-M10*1,5*13	40-M8*1,25*13
HPR41132	HPR41133	27	250	280	450/3000	51-M10*1,5*13	40-M8*1,25*13
HPR41134	HPR41135	32	250	280	450/3000	51-M10*1,5*13	40-M8*1,25*13
HPR41136	HPR41137	38	250	280	450/3000	51-M10*1,5*13	40-M8*1,25*13
HPR41138	HPR41139	41	250	280	450/3000	51-M10*1,5*13	40-M8*1,25*13
HPR41140	HPR41141	45	250	280	450/3000	51-M10*1,5*13	40-M8*1,25*13
HPR41142	HPR41143	53	210	235	450/3000	51-M10*1,5*13	40-M8*1,25*13
HPR41144	HPR41145	60	180	200	450/3000	51-M10*1,5*13	40-M8*1,25*13

## ŞAFT TIPLERİ

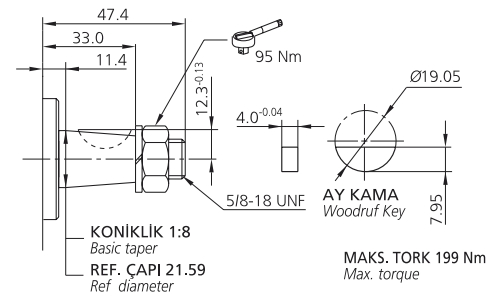
SAE 16-9(A) 5/8" 9 DİŞ SPLINE



SAE 22-4(A) 7/8" 13 DİŞ SPLINE

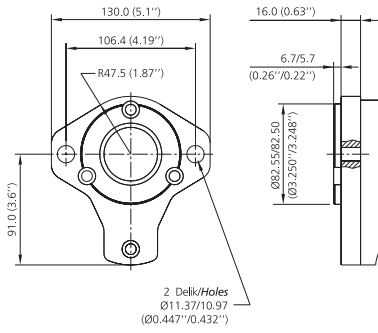


KONİK KAMALI 1:8 ŞAFT

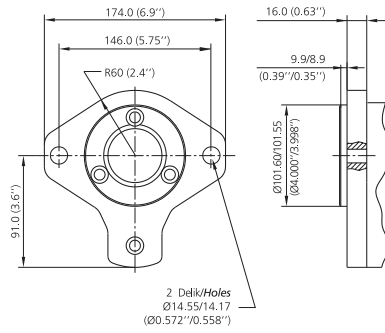


## KAPAK TIPLERİ

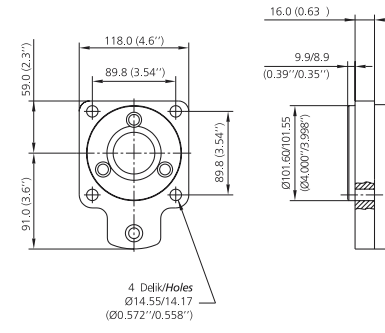
SEA 82-2 (A-2 civatalı / bolt)



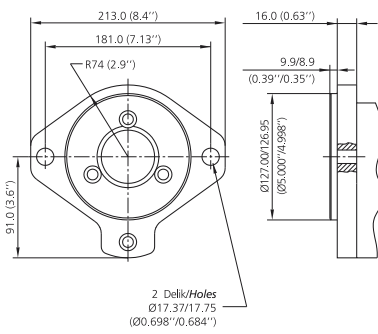
SEA 101-2 (B-2 civatalı / bolt)



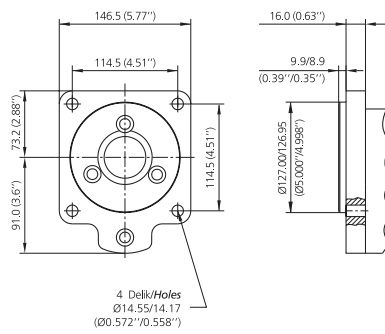
SEA 101-4 (B-4 civatalı / bolt)



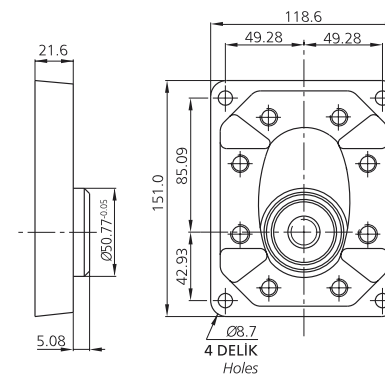
SEA 127-2 (C-2 civatalı / bolt)



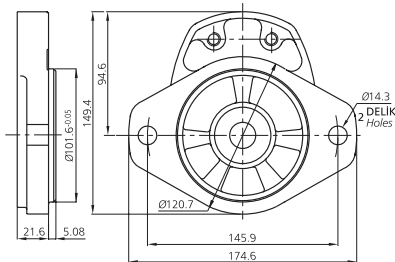
SEA 127-4 (C-4 civatalı / bolt)



B TIPI DİKDÖRTGEN KAPAK



G KAPAK TIPI



DÖKÜM  
GÖVDELI  
POMPALAR

DÖKÜM  
GÖVDELI  
POMPALAR



## DÖKÜM GÖVDELİ POMPALAR

### 1600 SERİSİ

POMPA TİPİ	İLETİM HACMİ (cm <sup>3</sup> /dev)	ÇALIŞMA BASINCI (bar)	ANİ BASINÇ (bar)	MIN/MAX DEVİR (dev/dk)
1604	12,38	170	180	500/2700
1606	14,6	170	180	500/2700
1608	19,4	170	180	500/2700
1610	24,3	170	180	500/2700
1613	31,6	155	165	500/2700
1617	41,3	155	165	500/2700

### 1900 SERİSİ

POMPA TİPİ	İLETİM HACMİ (cm <sup>3</sup> /dev)	ÇALIŞMA BASINCI (bar)	ANİ BASINÇ (bar)	MIN/MAX DEVİR (dev/dk)
1905	22	210	250	600/2700
1906	29,5	210	250	600/2700
1907	33,43	210	250	600/2700
1909	41,5	210	250	600/2700
1911	51,8	210	250	600/2700
1913	62,1	210	250	600/2700
1916	74,2	170	210	600/2700

### 2200 SERİSİ

POMPA TİPİ	İLETİM HACMİ (cm <sup>3</sup> /dev)	ÇALIŞMA BASINCI (bar)	ANİ BASINÇ (bar)	MIN/MAX DEVİR (dev/dk)
2207	53,6	210	250	600/2700
2208	58,7	210	250	600/2700
2210	70,1	210	250	600/2700
2213	85,7	210	250	600/2700
2215	101,1	170	210	600/2700
2216	110,8	170	210	600/2700

### QR4 SERİSİ

POMPA TİPİ	İLETİM HACMİ (cm <sup>3</sup> /dev)	ÇALIŞMA BASINCI (bar)	ANİ BASINÇ (bar)	MIN/MAX DEVİR (dev/dk)
4016	16	250	280	450/3000
4019	19	250	280	450/3000
4023	23	250	280	450/3000
4027	27	250	280	450/3000
4032	32	250	280	450/3000
4038	38	250	280	450/3000
4045	45	250	280	450/3000
4053	53	210	235	450/3000
4060	60	180	200	450/3000



## DÖKÜM GÖVDELİ POMPALAR

### QR5 SERİSİ

POMPA TİPİ	İLETİM HACMİ (cm <sup>3</sup> /dev)	ÇALIŞMA BASINCI (bar)	ANİ BASINÇ (bar)	MIN/MAX DEVİR (dev/dk)
5045	45	250	280	450/3000
5053	53	250	280	450/3000
5063	63	250	280	450/3000
5073	73	250	280	450/3000
5085	85	250	280	450/3000
5100	100	210	235	450/3000
5120	120	180	200	450/3000

### QR6 SERİSİ

POMPA TİPİ	İLETİM HACMİ (cm <sup>3</sup> /dev)	ÇALIŞMA BASINCI (bar)	ANİ BASINÇ (bar)	MIN/MAX DEVİR (dev/dk)
6100	100	250	280	450/2750
6117	117	250	280	450/2750
6137	137	250	280	450/2750
6160	160	250	280	450/2750
6187	187	210	235	450/2750
6220	220	180	200	450/2750

### QS4 SERİSİ

POMPA TİPİ	İLETİM HACMİ (cm <sup>3</sup> /dev)	ÇALIŞMA BASINCI (bar)	ANİ BASINÇ (bar)	MIN/MAX DEVİR (dev/dk)
4016	16	250	280	450/3000
4023	22,2	250	280	450/3000
4027	26,1	250	280	450/3000
4032	30,9	250	280	450/3000
4037	35,8	250	280	450/3000
4042	40,6	210	235	450/3000

### QS5 SERİSİ

POMPA TİPİ	İLETİM HACMİ (cm <sup>3</sup> /dev)	ÇALIŞMA BASINCI (bar)	ANİ BASINÇ (bar)	MIN/MAX DEVİR (dev/dk)
5045	43,5	250	280	450/3000
5051	49,3	250	280	450/3000
5060	58	250	280	450/3000
5070	67,7	250	280	450/3000
5085	82,2	210	235	450/3000



## DÖKÜM GÖVDELİ POMPALAR

### QS6 SERİSİ

POMPA TİPİ	İLETİM HACMİ (cm <sup>3</sup> /dev)	ÇALIŞMA BASINCI (bar)	ANİ BASINÇ (bar)	MIN/MAX DEVİR (dev/dk)
6083	80,3	250	280	450/2750
6097	93,8	250	280	450/2750
6113	109,3	250	280	450/2750
6132	127,6	250	280	450/2750
6155	149,9	210	235	450/2750

### QS7 SERİSİ

POMPA TİPİ	İLETİM HACMİ (cm <sup>3</sup> /dev)	ÇALIŞMA BASINCI (bar)	ANİ BASINÇ (bar)	MIN/MAX DEVİR (dev/dk)
7155	149,9	250	280	450/2400
7180	174,1	250	280	450/2400
7208	201,1	250	280	450/2400
7248	239,8	250	280	450/2400

### QX5 SERİSİ

POMPA TİPİ	İLETİM HACMİ (cm <sup>3</sup> /dev)	ÇALIŞMA BASINCI (bar)	ANİ BASINÇ (bar)	MIN/MAX DEVİR (dev/dk)
5023	23	250	280	450/3000
5026	26	250	280	450/3000
5027	27	250	280	450/3000
5029	29	250	280	450/3000
5033	33	250	280	450/3000
5036	36	250	280	450/3000
5037	37	250	280	450/3000
5041	41	250	280	450/3000
5046	46	250	280	450/3000
5051	51	250	280	450/3000
5056	56	230	255	450/3000
5063	63	210	235	450/3000
5068	68	190	215	450/3000



### TAHRİK MİLİ

KOD	TAHRİK MİLİ	1600	1900	2200
A	5/8" SAE 'A' Spline	X	X	X
E	5/8" SAE 'A' Paralel	X	X	X
B	7/8" SAE 'B' Spline	X	X	X
F	7/8" SAE 'B' Paralel	X	X	X
Q	1" SAE 'BB' Spline		X	X
H	1" SAE 'BB' Paralel		X	X
C	1 1/4" SAE 'C' Spline			X
G	1 1/4" SAE 'C' Paralel			X
R	1 1/8" SAE Paralel		X	X

### ÖN KAPAK

KOD	ÖN KAPAK	1600	1900	2200
1	SAE 'A' 2-DELİK	X	X	
2	SAE 'B' 2-DELİK		X	X
3	SAE 'B' 4-DELİK		X	X
4	SAE 'C' 2-DELİK		X	X
5	SAE 'C' 4-DELİK		X	X
7	SAE 'D' 4-DELİK			
8	6 DELİKLİ DAİRESEL KAPAK	X		

### TAHRİK MİLİ

KOD	TAHRİK MİLİ	QR4	QS4	QR5	QS5	QR6	QS6	QS7
A	5/8" SAE 'A' Spline	X	X					
E	5/8" SAE 'A' Spline	X	X					
B	7/8" SAE 'B' Spline	X	X	X	X			
F	7/8" SAE 'B' Paralel	X	X					
Q	1" SAE 'BB' Spline	X	X	X	X			
H	1" SAE 'BB' Paralel	X	X	X	X			
C	1 1/4" SAE 'C' Spline			X	X	X	X	X
G	1 1/4" SAE 'C' Paralel			X	X	X	X	X
T	1 1/2" SAE 'CC' Spline					X	X	X
N	1 1/2" SAE 'CC' Paralel					X	X	X
D	1 3/4" SAE 'D' Spline							X
P	1 3/4" SAE 'D' Paralel							X

### ÖN KAPAK

KOD	ÖN KAPAK	QR4	QS4	QR5	QS5	QR6	QS6	QS7
1	SAE 'A' 2-DELİK	X	X					
2	SAE 'B' 2-DELİK	X	X	X	X			
3	SAE 'B' 4-DELİK	X	X	X	X			
4	SAE 'C' 2-DELİK	X	X	X	X	X	X	
5	SAE 'C' 4-DELİK	X	X	X	X	X	X	X
7	SAE 'D' 4-DELİK							X
39	SAE 'E' 4-DELİK							X

### TAHRİK MİLİ

KOD	TAHRİK MİLİ	QX5
A	5/8" SAE 'A' Spline	
E	5/8" SAE 'A' Spline	
B	7/8" SAE 'B' Spline	X
F	7/8" SAE 'B' Paralel	X
Q	1" SAE 'BB' Spline	X
H	1" SAE 'BB' Paralel	X
C	1 1/4" SAE 'C' Spline	X
G	1 1/4" SAE 'C' Paralel	X
T	1 1/2" SAE 'CC' Spline	
N	1 1/2" SAE 'CC' Paralel	

### ÖN KAPAK

KOD	ÖN KAPAK	QX5
1	SAE 'A' 2-DELİK	
2	SAE 'B' 2-DELİK	X
3	SAE 'B' 4-DELİK	X
4	SAE 'C' 2-DELİK	X
5	SAE 'C' 4-DELİK	X
7	SAE 'D' 4-DELİK	



## PORT ÖLÇÜLERİ

### 1600-1900-2200 MODEL POMPALAR

KOD	GİRİŞ PORTU				ÇIKIŞ PORTU			
	SAE S/F METRIC	SAE S/F UNC	BSPP	SAE UNF O RING	SAE S/F METRIC	SAE S/F UNC	BSPP	SAE UNF O RING
1604 - 1617	YOK	YOK	1"	1" 5/16	YOK	YOK	1"	1" 5/16
1905 - 1909	1"	1"	YOK	YOK	3/4"	3/4"	YOK	YOK
1911 - 1916	1" 1/4	1" 1/4	YOK	YOK	1"	1"	YOK	YOK
2207 - 2213	1" 1/2	1" 1/2	YOK	YOK	1" 1/4	1" 1/4	YOK	YOK
2215 - 2216	2"	2"	YOK	YOK	1" 1/4	1" 1/4	YOK	YOK

### QR TİPİ MODEL POMPALAR

KOD	GİRİŞ PORTU				ÇIKIŞ PORTU			
	SAE S/F METRIC	OPTION 1 SAE S/F UNC	OPTION 2 BSPP	OPTION 3 SAE UNF O RING	SAE S/F METRIC	OPTION 1 SAE S/F UNC	OPTION 2 BSPP	OPTION 3 SAE UNF O RING
QR4016	1"	1"	1"	1" 5/16	1/2"	1/2"	1/2"	7/8"
QR4019	1"	1"	1"	1" 5/16	1/2"	1/2"	1/2"	7/8"
QR4023	1"	1"	1"	1" 5/16	1/2"	1/2"	1/2"	7/8"
QR4027	1" 1/4	1" 1/4	1" 1/4	1" 5/8	3/4"	3/4"	3/4"	1" 1/16
QR4032	1" 1/4	1" 1/4	1" 1/4	1" 5/8	3/4"	3/4"	3/4"	1" 1/16
QR4038	1" 1/4	1" 1/4	1" 1/4	1" 5/8	3/4"	3/4"	3/4"	1" 1/16
QR4045	1" 1/2	1" 1/2	YOK	YOK	1"	1"	1"	1" 1/16
QR4053	1" 1/2	1" 1/2	YOK	YOK	1"	1"	1"	1" 1/16
QR4060	1" 1/2	1" 1/2	YOK	YOK	1"	1"	1"	1" 1/16
QR5045	1" 1/2	1" 1/2	YOK	YOK	1"	1"	1"	1" 5/16
QR5053	1" 1/2	1" 1/2	YOK	YOK	1"	1"	1"	1" 5/16
QR5063	1" 1/2	1" 1/2	YOK	YOK	1"	1"	1"	1" 5/16
QR5073	2"	2"	YOK	YOK	1" 1/4	1" 1/4	1"	1" 5/16
QR5085	2"	2"	YOK	YOK	1" 1/4	1" 1/4	1"	1" 5/16
QR5100	2"	2"	YOK	YOK	1" 1/4	1" 1/4	1"	1" 5/16
QR5120	2"	2"	YOK	YOK	1" 1/4	1" 1/4	1"	1" 5/16
QR6100	2" 1/2	2" 1/2	YOK	YOK	1" 1/2	1" 1/2	YOK	YOK
QR6117	2" 1/2	2" 1/2	YOK	YOK	1" 1/2	1" 1/2	YOK	YOK
QR6160	2" 1/2	2" 1/2	YOK	YOK	1" 1/2	1" 1/2	YOK	YOK
QR6187	2" 1/2	2" 1/2	YOK	YOK	1" 1/2	1" 1/2	YOK	YOK
QR6220	2" 1/2	2" 1/2	YOK	YOK	1" 1/2	1" 1/2	YOK	YOK

## PORT ÖLÇÜLERİ

### QS TİPİ MODEL POMPALAR

PUMP KOD	GİRİŞ PORTU				ÇIKIŞ PORTU			
	SAE S/F METRIC	OPTION 1 SAE S/F UNC	OPTION 2 BSPP	OPTION 3 SAE UNF O RING	SAE S/F METRIC	OPTION 1 SAE S/F UNC	OPTION 2 BSPP	OPTION 3 SAE UNF O RING
QS4016	1"	1"	1"	1" 5/16	1/2"	1/2"	1/2"	7/8"
QS4023	1"	1"	1"	1" 5/16	1/2"	1/2"	1/2"	7/8"
QS4027	1" 1/4	1" 1/4	1" 1/4	1" 5/16	3/4"	3/4"	3/4"	1" 1/16
QS4032	1" 1/4	1" 1/4	1" 1/4	1" 5/8	3/4"	3/4"	3/4"	1" 1/16
QS4037	1" 1/4	1" 1/4	1" 1/4	1" 5/8	3/4"	3/4"	3/4"	1" 1/16
QS4042	1" 1/2	1" 1/2	YOK	YOK	1"	1"	3/4"	1" 1/16
QS5045	1" 1/2	1" 1/2	YOK	YOK	1"	1"	1"	1" 5/16
QS5051	1" 1/2	1" 1/2	YOK	YOK	1"	1"	1"	1" 5/16
QS5060	1" 1/2	1" 1/2	YOK	YOK	1"	1"	1"	1" 5/16
QS5070	2"	2"	YOK	YOK	1" 1/4	1" 1/4	1"	1" 5/16
QS5085	2"	2"	YOK	YOK	1" 1/4	1" 1/4	1"	1" 5/16
QS6083	2" 1/2	2" 1/2	YOK	YOK	1" 1/2	1" 1/2	YOK	YOK
QS6097	2" 1/2	2" 1/2	YOK	YOK	1" 1/2	1" 1/2	YOK	YOK
QS6113	2" 1/2	2" 1/2	YOK	YOK	1" 1/2	1" 1/2	YOK	YOK
QS6132	2" 1/2	2" 1/2	YOK	YOK	1" 1/2	1" 1/2	YOK	YOK
QS6155	2" 1/2	2" 1/2	YOK	YOK	1" 1/2	1" 1/2	YOK	YOK
QS7155	2" 1/2	2" 1/2	YOK	YOK	1" 1/2	1" 1/2	YOK	YOK
QS7180	2" 1/2	2" 1/2	YOK	YOK	1" 1/2	1" 1/2	YOK	YOK
QS7208	3"	3"	YOK	YOK	2"	2"	YOK	YOK
QS7248	3"	3"	YOK	YOK	2"	2"	YOK	YOK

### QX5 TİPİ MODEL POMPALAR

PUMP KOD	GİRİŞ PORTU				ÇIKIŞ PORTU			
	SAE S/F METRIC	OPTION 1 SAE S/F UNC	OPTION 2 BSPP	OPTION 3 SAE UNF O RING	SAE S/F METRIC	OPTION 1 SAE S/F UNC	OPTION 2 BSPP	OPTION 3 SAE UNF O RING
X5023	1"	1"	1"	1" 5/16	3/4"	3/4"	3/4"	7/8"
X5027	1"	1"	1"	1" 5/16	3/4"	3/4"	3/4"	7/8"
X5029	1" 1/4	1" 1/4	1" 1/4	1" 5/16	3/4"	3/4"	3/4"	1" 1/16
X5033	1" 1/2	1" 1/2	1" 1/4	1" 5/16	1"	1"	3/4"	1" 1/16
X5036	2"	2"	1" 1/2	1" 5/8	1" 1/4	1" 1/4	3/4"	1" 1/16
X5037	2"	2"	1" 1/2	1" 5/8	1" 1/4	1" 1/4	3/4"	1" 1/16
X5041	2"	2"	1" 1/2	1" 5/8	1" 1/4	1" 1/4	1"	1" 1/16
X5046	2"	2"	1" 1/2	1" 5/8	1" 1/4	1" 1/4	1"	1" 1/16
X5051	2" 1/2	2" 1/2	1" 1/2	1" 5/8	1" 1/2	1" 1/2	1"	1" 1/16
X5063	2" 1/2	2" 1/2	1" 1/2	1" 5/8	1" 1/2	1" 1/2	1"	1" 1/16
X5068	2" 1/2	2" 1/2	1" 1/2	1" 5/8	1" 1/2	1" 1/2	1"	1" 1/16

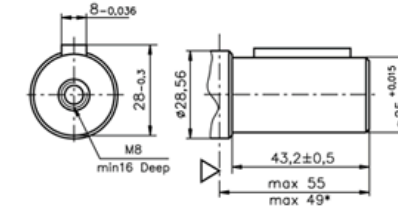
# TORK MOTORLARI

## TORK MOTORLARI

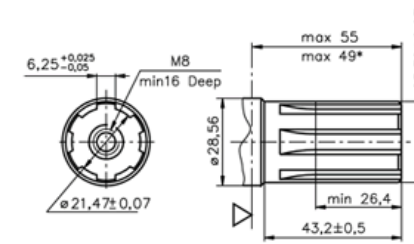
## TORK MOTORLARI

### HMR SERİSİ

KOD	TAHRİK MİLİ	İLETİM HACMİ (cm <sup>3</sup> /dev)	SÜREKLİ DEVİR (dev/dk)	SÜREKLİ TORK (daNm)	SÜREKLİ ÇIKIŞ GÜCÜ (Kw)	SÜREKLİ AKIŞ MİKTARI (L/dk)	SÜREKLİ GİRİŞ BASINCI (bar)
HMR50A.2	25mm	50	750	9,2	7,00	38	155/138
HMR80A.2	25 mm	80	635	15	9,50	53	155/139
HMR100A.2	25 mm	100	510	19,6	9,50	53	155/138
HMR125A.2	25 mm	125	430	23	8,60	53	155/138
HMR160A.2	25 mm	160	329	27,1	8,60	53	138/124
HMR200A.2	25 mm	200	266	32,8	8,60	53	138/124
HMR250A.2	25 mm	250	213	40,1	8,60	53	138/124
HMR305A.2	25 mm	305	171	41,7	7,00	53	124/103
HMR370A.2	25 mm	370	142	40,2	6,30	53	103/90
HMR395A.2	25 mm	395	133	42,9	6,30	53	103/90



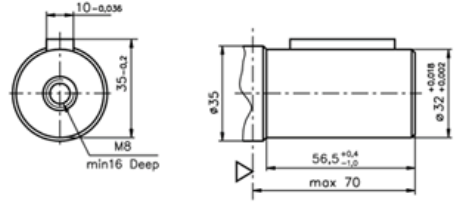
KOD	TAHRİK MİLİ	İLETİM HACMİ (cm <sup>3</sup> /dev)	SÜREKLİ DEVİR (dev/dk)	SÜREKLİ TORK (daNm)	SÜREKLİ ÇIKIŞ GÜCÜ (Kw)	SÜREKLİ AKIŞ MİKTARI (L/dk)	SÜREKLİ GİRİŞ BASINCI (bar)
HMR50A.6S.2	SAE 6B	50	750	9,2	7,00	38	155/138
HMR80A.6S.2	SAE 6B	80	635	15	9,50	53	155/138
HMR100A.6S.2	SAE 6B	100	510	19,6	9,50	53	155/138
HMR125A.6S.2	SAE 6B	125	430	23	8,60	53	155/138
HMR160A.6S.2	SAE 6B	160	329	27,1	8,60	53	138/124
HMR200A.6S.2	SAE 6B	200	266	32,8	8,60	53	138/124
HMR250A.6S.2	SAE 6B	250	213	40,1	8,60	53	138/124
HMR305A.6S.2	SAE 6B	305	171	41,7	7,00	53	124/103
HMR305A.6S.2	SAE 6B	305	171	41,7	7,00	53	124/103





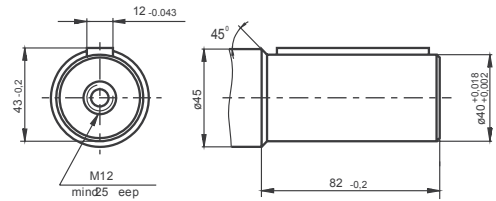
**HMS SERİSİ**

KOD	TAHRİK MİLİ	İLETİM HACMİ (cm <sup>3</sup> /dev)	SÜREKLİ DEVİR (dev/dk)	SÜREKLİ TORK (daNm)	SÜREKLİ ÇIKIŞ GÜCÜ (Kw)	SÜREKLİ AKIŞ MİKTARI (L/dk)	SÜREKLİ GİRİŞ BASINCI (bar)
HMS80BR.2	32mm	80	908	19,5	16	75	310/170
HMS80BS.2	32mm	80	908	19,5	16	75	310/170
HMS100BR.2	32mm	100	924	24,5	16	95	310/170
HMS100BS.2	32mm	100	924	24,5	16	95	310/170
HMS130BR.2	32mm	125	820	31,5	16	95	310/170
HMS130BS.2	32mm	125	820	31,5	16	95	310/170
HMS160BR.2	32mm	160	713	38,5	16	115	260/170
HMS160BS.2	32mm	160	713	38,5	16	115	260/170
HMS200BR.2	32mm	195	577	46,5	16	115	260/170
HMS200BS.2	32mm	195	577	46,5	16	115	260/170
HMS245BR.2	32mm	245	462	55,5	16	115	260/170
HMS245BS.2	32mm	245	462	55,5	16	115	260/170
HMS305BR.2	32mm	305	365	61	15	115	240/170
HMS305BS.2	32mm	305	365	61	15	115	240/170

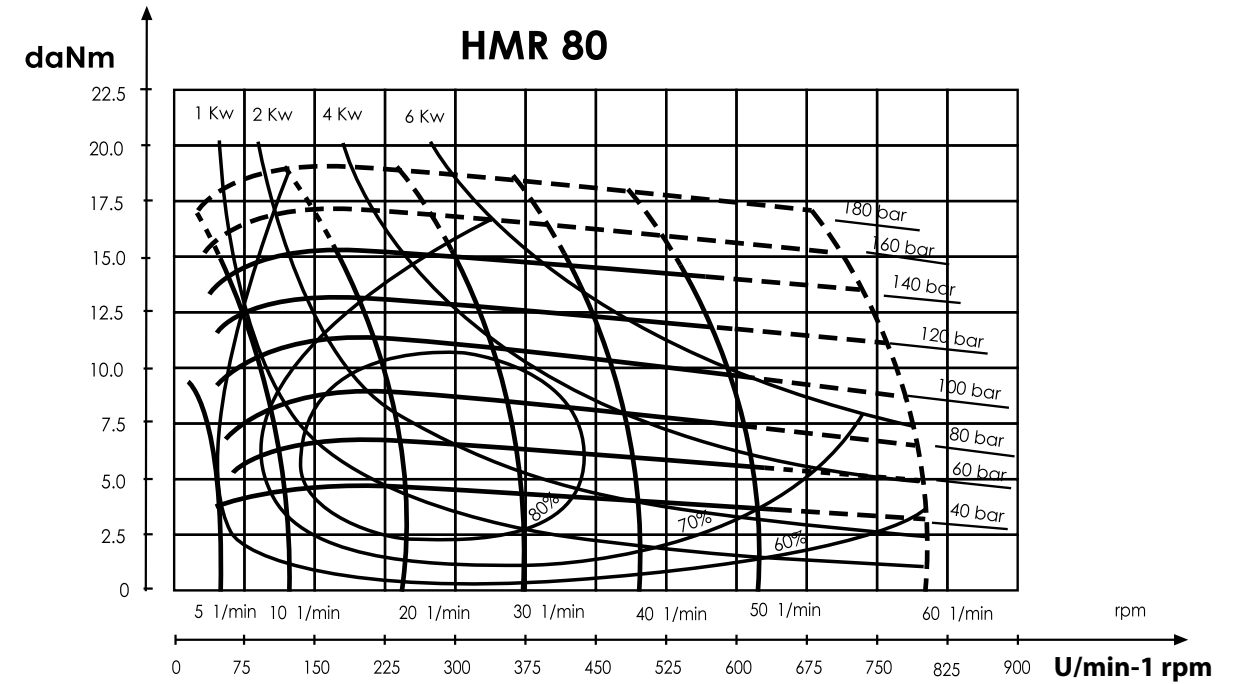
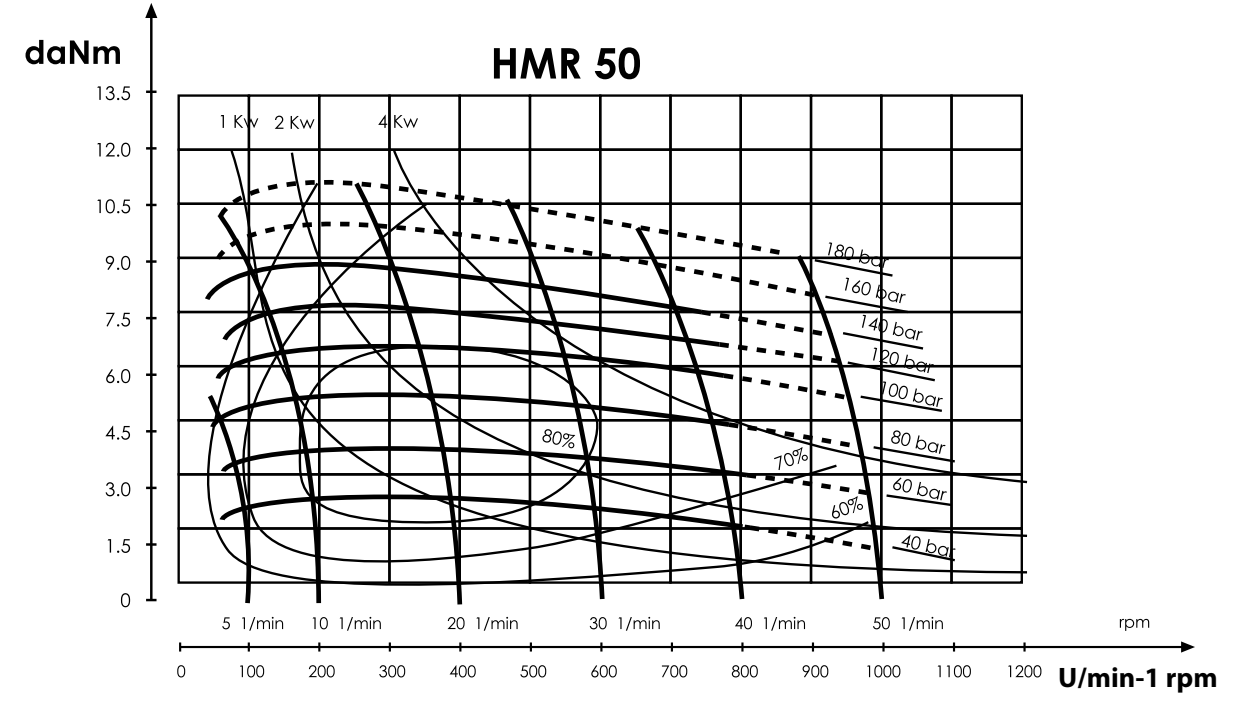


**HMT SERİSİ**

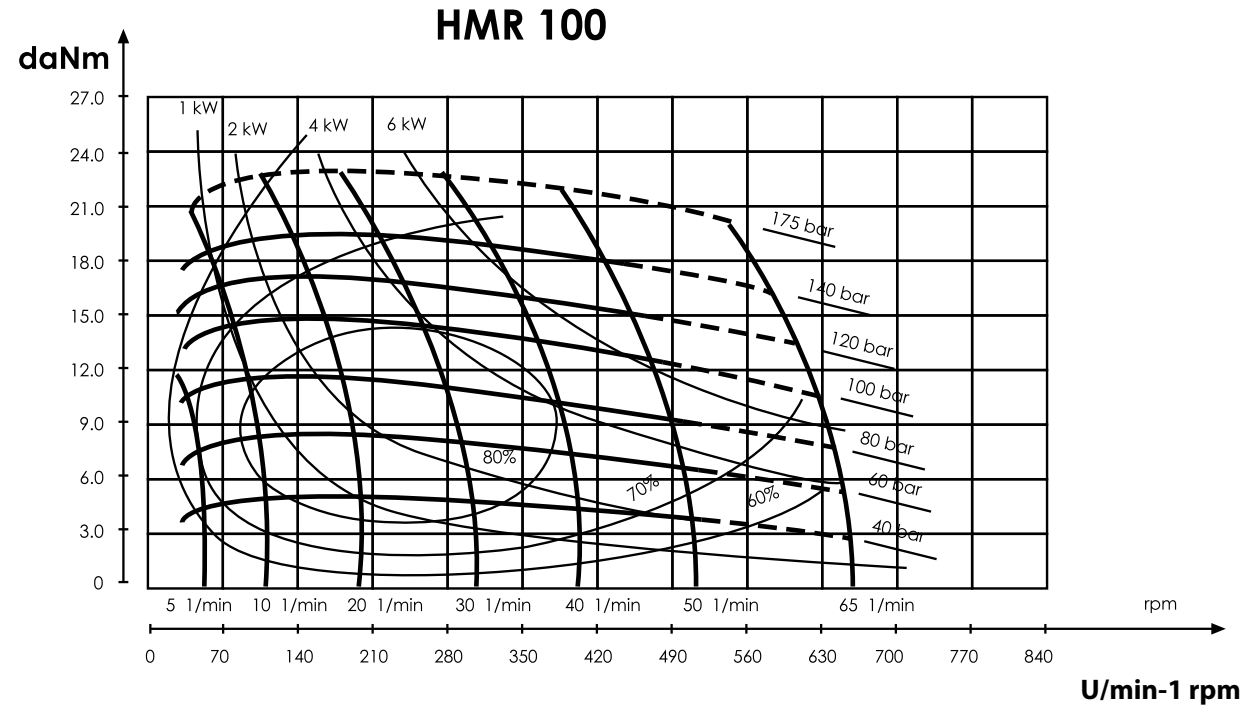
KOD	TAHRİK MİLİ	İLETİM HACMİ (cm <sup>3</sup> /dev)	SÜREKLİ DEVİR (dev/dk)	SÜREKLİ TORK (daNm)	SÜREKLİ ÇIKIŞ GÜCÜ (Kw)	SÜREKLİ AKIŞ MİKTARI (L/dk)	SÜREKLİ GİRİŞ BASINCI (bar)
HMT195M.2	40mm	195	775	57,5	40	150	310/205
HMT245M.2	40mm	245	615	73	40	150	310/205
HMT310M.2	40mm	310	485	93	40	150	310/205
HMT390M.2	40mm	390	387	115,5	40,7	150	310/205



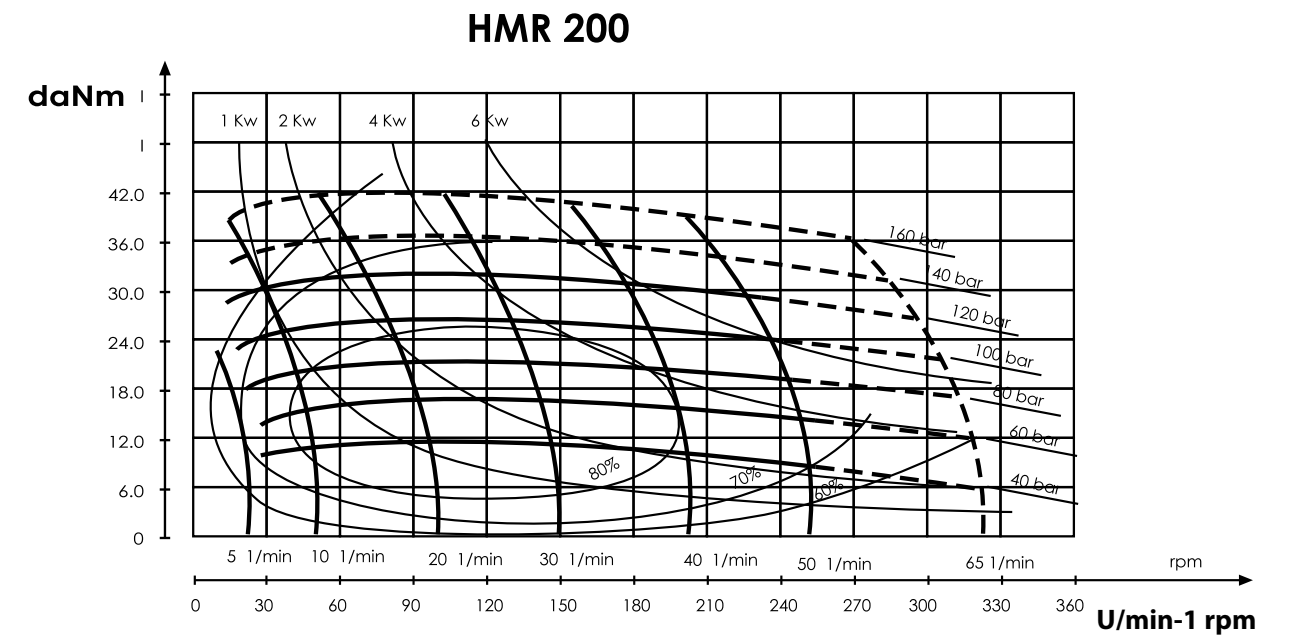
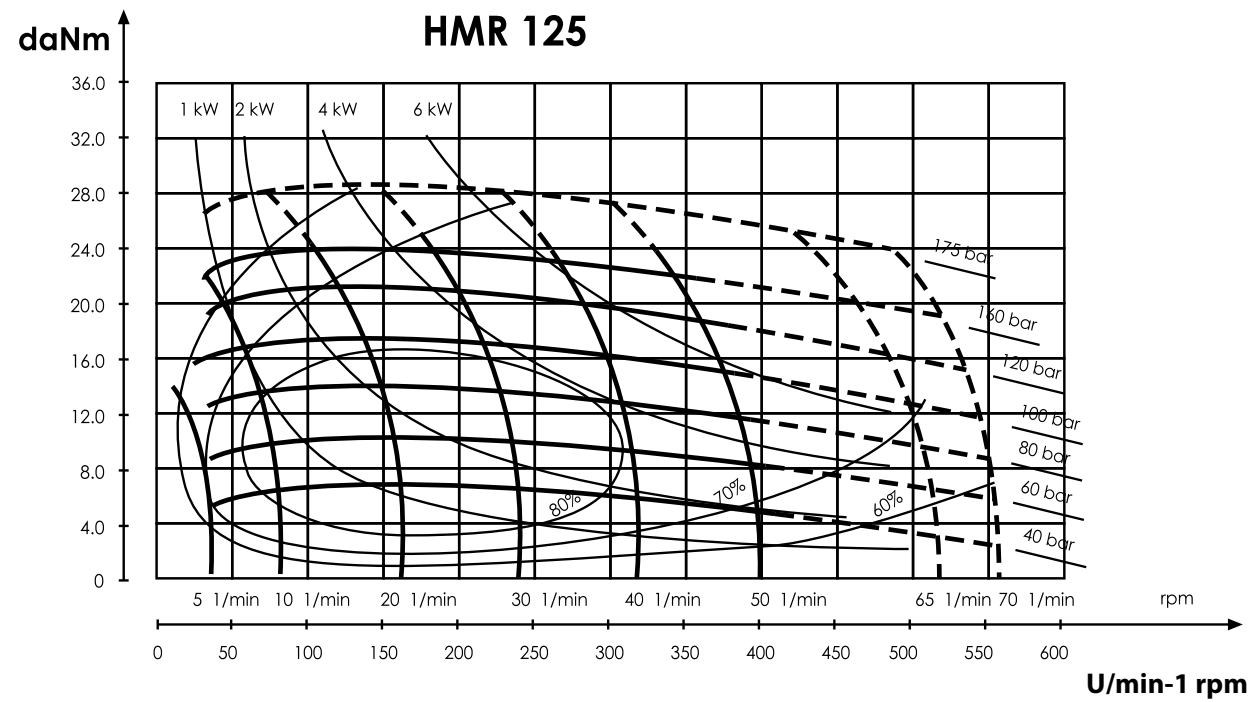
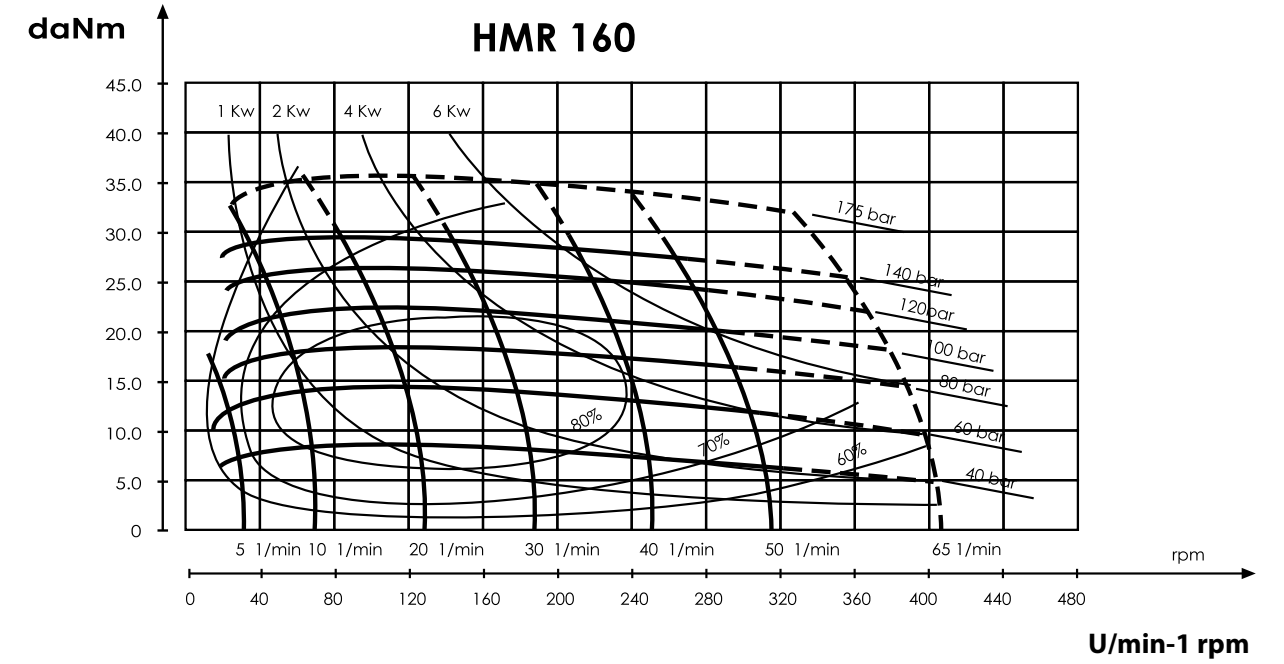
**TORK MOTORLARI**



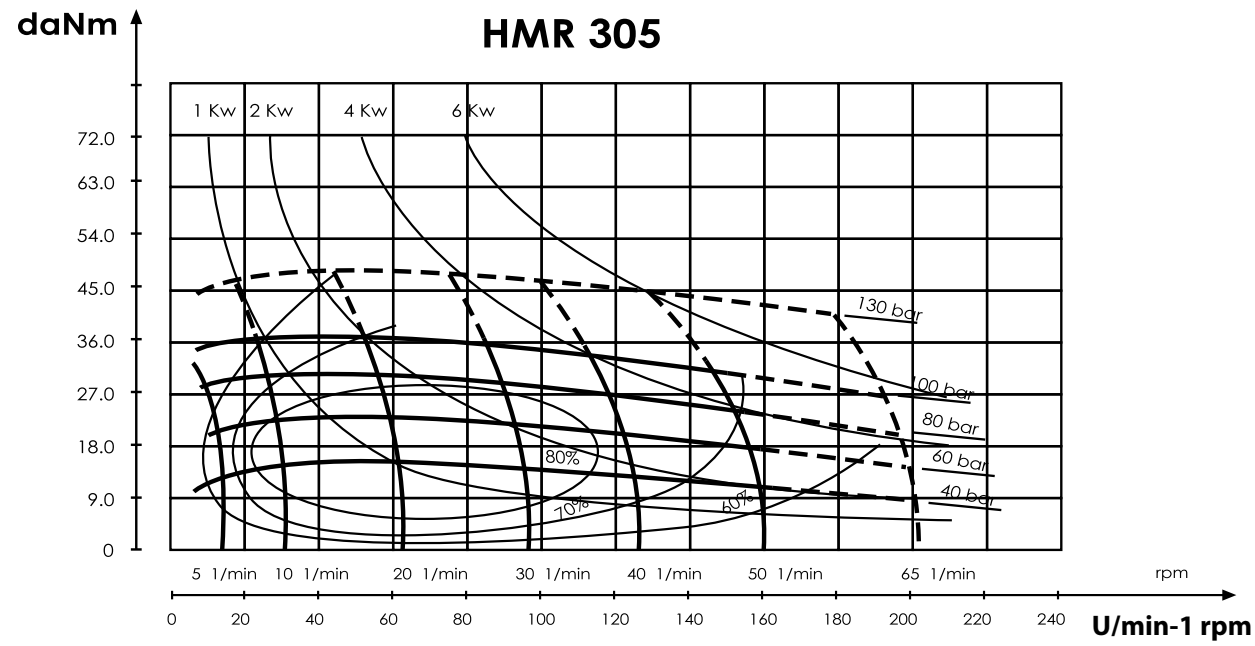
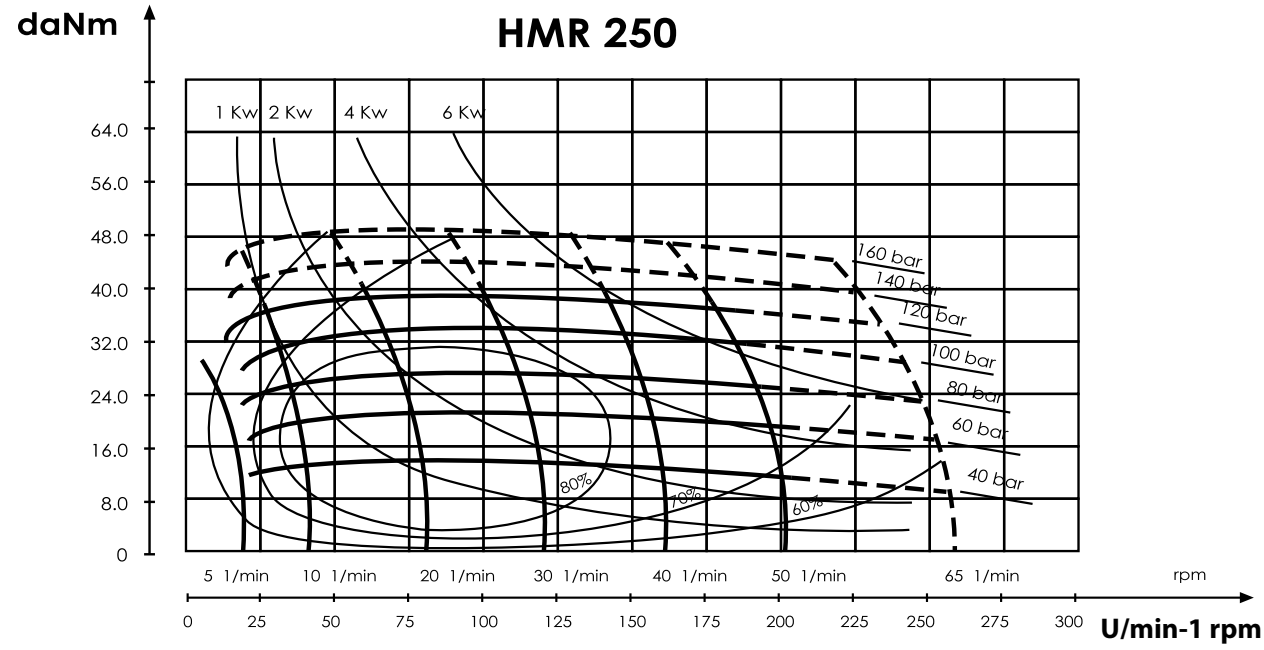
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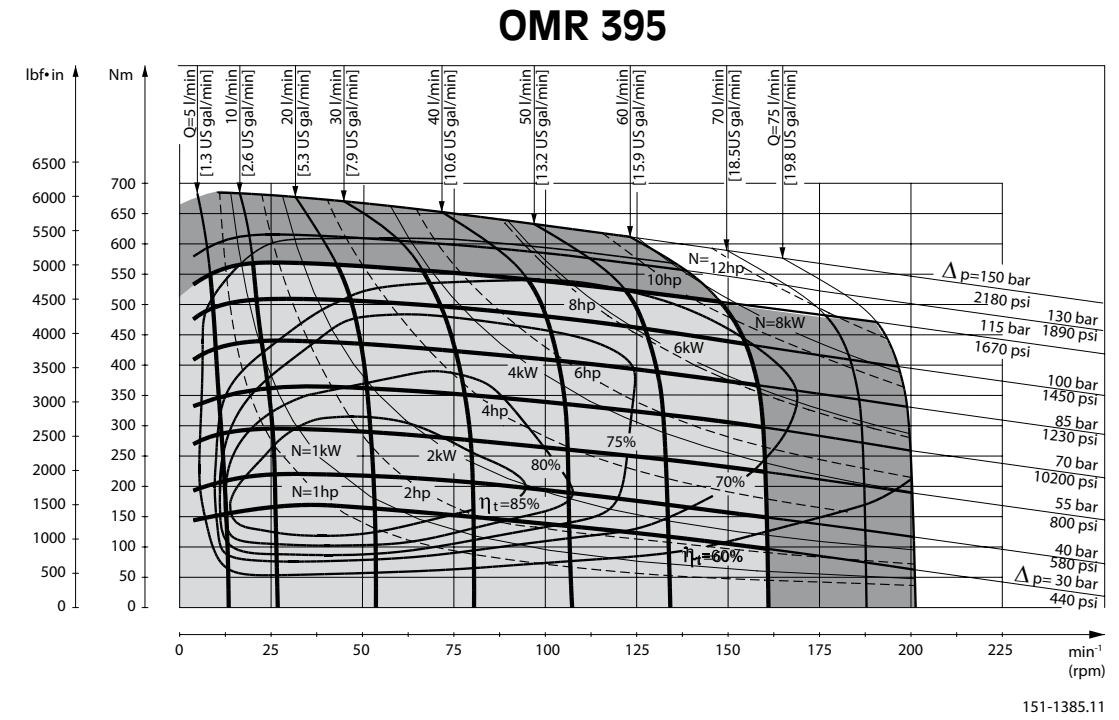
**TORK MOTORLARI**



**TORK MOTORLARI**



**TORK MOTORLARI**





# HİDROSTATİK DİREKSİYON ÜNİTELERİ

## HİDROSTATİK DİREKSİYON ÜNİTELERİ

## HİDROSTATİK DİREKSİYON ÜNİTELERİ

### AÇIK MERKEZLİ (OPEN CENTER)



KOD	İLETİM HACMİ (cm <sup>3</sup> /dev)	UZUNLUK (mm)	DEBİ (Lt/dk)	SÜREKLİ BASINÇ (bar)	EMNİYET VALFİ BASINCI (bar)	ŞOK VALF BASINCI (bar)	T HATTINDAKİ BASINÇ (bar)
HHU050ON.4	50cc/rev	120,7	12	210	90~95	150~170	35
HHU080ON.4	80cc/rev	124,7	12	210	140	200	35
HHU100ON.4	100cc/rev	127,5	12	210	90~95	150~170	35
HHU100ON.4M	100cc/rev	127,5	12	210	140	200	35
HHU120ON.4	120cc/rev	130,1	16	210	140	200	35
HHU160ON.4	160cc/rev	136,2	23	210	140	200	35
HHU200ON.4	200cc/rev	139,8	23	210	140	200	35
HHU250ON.4	260cc/rev	149	23	210	140	200	35
HHU315ON.4	315cc/rev	154,9	32	210	140	200	20

### YÜKE DUYARLI (LOAD SENSING)



KOD	İLETİM HACMİ (cm <sup>3</sup> /dev)	UZUNLUK (mm)	DEBİ (Lt/dk)	SÜREKLİ BASINÇ (bar)	EMNİYET VALFİ BASINCI (bar)	ŞOK VALF BASINCI (bar)	T HATTINDAKİ BASINÇ (bar)
HHU100LS.4	100cc/rev	127,5	23	210	140~145	200	10
HHU120LS.4	120cc/rev	130,1	23	210	175	240	35
HHU160LS.4	160cc/rev	136,2	23	210	175	240	35
HHU200LS.4	200cc/rev	139,8	23	210	90~95	150~170	35
HHU250LS.4	260cc/rev	149	23	210	90~95	150~170	35
HHU315LS.4	315cc/rev	154,9	32	219	175	240	15
HHU400LS.4	400cc/rev	167,7	32	210	175	240	15
HHU500LS.4	500cc/rev	182,7	32	210	175	240	15
HHU630LS.4	630cc/rev	198,8	63	210	170	230	20

# MONOBLOK YÖN KONTROL VALFLERİ

## MONOBLOK YÖN KONTROL VALFLERİ



## MONOBLOK YÖN KONTROL VALFLERİ



KOD	SÜRGÜ	DIŞ ÖLÇÜSÜ	Qmax (L/Dk)
MV045110M	1	3/8"	35
MV045110M	1	3/8"-1/2"	50
MV045222M	2	3/8"-1/2"	50
MV045306M	3	3/8"-1/2"	50
MV045401M	4	3/8"-1/2"	50
MV045501M	5	3/8"-1/2"	50
MV045601M	6	3/8"-1/2"	50
MV045701M	7	3/8"-1/2"	50
MV070101M	1	1/2"	70
MV070201M	2	1/2"	70
MV070301M	3	1/2"	70
MV070401M	4	1/2"	70
MV070501M	5	1/2"	70
MV070601M	6	1/2"	70
MV070701M	7	1/2"	70
MV090210M	2	3/4"	90
MV090310M	3	3/4"	90

**YÖN KONTROL VALFLERİ**

KOD	DİLİM SAYISI	BOYUT	Q <sub>max</sub> ( L/m )
MV080101M	1	1/2"-3/4	80
MV080201M	2	1/2"-3/4	80
MV080301M	3	1/2"-3/4	80
MV080401M	4	1/2"-3/4	80
MV080501M	5	1/2"-3/4	80
MV080601M	6	1/2"-3/4	80
MV080701M	7	1/2"-3/4	80
MV080801M	8	1/2"-3/4	80
MV080901M	9	1/2"-3/4	80
MV100101M	1	3/4"	100
MV100201M	2	3/4"	100
MV100301M	3	3/4"	100
MV100401M	4	3/4"	100
MV100501M	5	3/4"	100
MV100601M	6	3/4"	100
MV100701M	7	3/4"	100
MV100801M	8	3/4"	100
MV100901M	9	3/4"	100
MV120101M	1	3/4"	120
MV120201M	2	3/4"	120
MV120301M	3	3/4"	120
MV120401M	4	3/4"	120
MV120501M	5	3/4"	120
MV120601M	6	3/4"	120
MV120701M	7	3/4"	120
MV120801M	8	3/4"	120
MV120901M	9	3/4"	120
MV150101M	1	3/4" - 1"	150
MV150201M	2	3/4" - 1"	150
MV150301M	3	3/4" - 1"	150
MV150401M	4	3/4" - 1"	150
MV150501M	5	3/4" - 1"	150
MV150601M	6	3/4" - 1"	150
MV150701M	7	3/4" - 1"	150
MV150801M	8	3/4" - 1"	150
MV150901M	9	3/4" - 1"	150



# HİDROLİK GÜÇ ÜNİTELERİ

# HİDROLİK GÜÇ ÜNİTELERİ

## HİDROLİK GÜÇ ÜNİTELERİ

### TEK ETKİLİ UYGULAMA



	MOTOR GÜCÜ	POMPA AKIŞ HIZI	AKIŞ TANKI HACMİ	MONTAJ YÖNÜ	BOBİN
<b>12 V DC</b>	0,8 KW - 12 V DC/3800 rpm				
	1,6 KW - 12 V DC/2950 rpm				
	2,6 KW - 12 V DC/2300 rpm				
<b>24 V DC</b>	0,8 KW - 24 V DC/2300 rpm				
	2,2 KW - 24 V DC/3100 rpm				
	3,0 KW - 24 V DC/2300 rpm				
	4,5 KW - 24 V DC/2700 rpm				
<b>220 V AC</b>	0,75 KW - 220 V AC/2800 rpm	0,08 cc			
	0,75 KW - 220 V AC/1400 rpm	1,10 cc	2 L		
	1,5 KW - 220 V AC/2850 rpm	1,60 cc	2,8 L		
	1,5 KW - 220 V AC/1400 rpm	2,10 cc	4 L		
	2,2 KW - 220 V AC/2850 rpm	2,70 cc	5 L	YATAY	12 VDC
	2,2 KW - 220 V AC/1400 rpm	3,20 cc	6 L	DIKEY	24 VDC
<b>380 V AC</b>	0,75 KW - 380 V AC/2800 rpm	3,70 cc	8 L		110 VAC
	0,75 KW - 380 V AC/1400 rpm	4,20 cc	10 L		220 VAC
	1,1 KW - 380 V AC/2800 rpm	4,80 cc	12 L		
	1,1 KW - 380 V AC/1400 rpm	5,80 cc	20 L		
	1,5 KW - 380 V AC/2850 rpm	7,00 cc	30 L		
	1,5 KW - 380 V AC/1400 rpm	8,00 cc			
	2,2 KW - 380 V AC/2850 rpm				
	2,2 KW - 380 V AC/1400 rpm				
3,0 KW - 380 V AC/2850 rpm					



## HİDROLİK GÜÇ ÜNİTELERİ

### ÇİFT ETKİLİ UYGULAMA



	MOTOR GÜCÜ	POMPA AKIŞ HIZI	AKIŞ TANKI HACMİ	MONTAJ YÖNÜ
12 V DC	0,8 KW - 12 V DC/3800 rpm			YATAY DİKEY
	1,6 KW - 12 V DC/2950 rpm			
	2,6 KW - 12 V DC/2300 rpm			
24 V DC	0,8 KW - 24 V DC/2300 rpm			
	2,2 KW - 24 V DC/3100 rpm			
	3,0 KW - 24 V DC/2300 rpm			
220 V AC	4,5 KW - 24 V DC/2700 rpm	0,08 cc		
	0,75 KW - 220 V AC/2800 rpm	1,10 cc	2 L	
	0,75 KW - 220 V AC/1400 rpm	1,60 cc	2,8 L	
	1,5 KW - 220 V AC/2850 rpm	2,10 cc	4 L	
	1,5 KW - 220 V AC/1400 rpm	2,70 cc	5 L	
	2,2 KW - 220 V AC/2850 rpm	3,20 cc	6 L	
	2,2 KW - 220 V AC/2850 rpm	3,70 cc	8 L	
	0,75 KW - 380 V AC/2800 rpm	4,20 cc	10 L	
	0,75 KW - 380 V AC/1400 rpm	4,80 cc	2 L	
	1,1 KW - 380 V AC/2800 rpm	5,80 cc	20 L	
380 V AC	1,1 KW - 380 V AC/1400 rpm	7,00 cc	30 L	
	1,5 KW - 380 V AC/2850 rpm	8,00 cc		
	1,5 KW - 380 V AC/1400 rpm			
	2,2 KW - 380 V AC/2850 rpm			
	2,2 KW - 380 V AC/1400 rpm			
	3,0 KW - 380 V AC/2850 rpm			



KOD	TANIM
MB10	YÜKSELTİCİ PLATE
MB12	VALF PATE
MB17	PLATTEN-EL POMPASI PLATE

KOD	TANIM	MOTOR	POMPA
ESP24220	Emergency Pump	2.2 KW - 24 V DC	2.0 cc
ESP24300	Emergency Pump	3.0 KW - 24 V DC	4.2 cc

## HİDROLİK GÜÇ ÜNİTELERİ

### ELEKTRİK MOTORLARI



KOD	VOLTAJ	MOTOR GÜCÜ	U/min - rpm
MS701-4	380V AC	0.37 KW	1450
MS701-2	380V AC	0.37 KW	2800
MS801-4	380V AC	0.75 KW	1400
MS801-2	380V AC	0.75 KW	2800
MS802-4	380V AC	1.1 KW	1400
MS802-2	380V AC	1.1 KW	2800
MS90M1-4	380V AC	1.5 KW	1400
MS90S-2	380V AC	1.5 KW	2850
MS90L2-4	380V AC	2.2 KW	1400
MS90L1-2	380V AC	2.2 KW	2850
MS90L2-2	380V AC	3 KW	2850

KOD	VOLTAJ	MOTOR GÜCÜ	U/min - rpm
ML802-4	220V AC	0.75 KW	1450
ML801-2	220V AC	0.75 KW	2800
ML90L1-4	220V AC	1.5 KW	1400
ML90S-2	220V AC	1.5 KW	2850
ML90L2-2	220V AC	2.2 KW	2850

KOD	VOLTAJ	MOTOR GÜCÜ	U/min - rpm
MD12080AE	12V DC	0.8 KW	3800
MD12160	12V DC	1.6 KW	2950
MD12260	12V DC	2.6 KW	2300

KOD	VOLTAJ	MOTOR GÜCÜ	U/min - rpm
MD24080AE	24V DC	0.8 KW	3800
MD24220	24V DC	2.2 KW	3100
MD24300	24V DC	3 KW	2300
MD24300	24V DC	4.5 KW	2300

### POMPA

KOD	İLETİM HACMİ (cm³/dev)	SÜREKLİ BASINÇ	MAX. HIZ
0.5P008ADR6	0,08	250 Bar	3500
0.5P011ADR6	1,10	250 Bar	3500
0.5P016ADR6	1,60	250 Bar	3500
0.5P021ADR6	2,10	250 Bar	3500
0.5P027ADR6	2,70	250 Bar	3500
0.5P032ADR6	3,20	250 Bar	3500
0.5P037ADR6	3,70	220 Bar	3500
0.5P042ADR6	4,20	220 Bar	3500
0.5P048ADR6	4,80	200 Bar	3500
0.5P058ADR6	5,80	200 Bar	3500
0.5P070ADR6	7,00	200 Bar	3500
0.5P080ADR6	8,00	180 Bar	3500

## HİDROLİK GÜÇ ÜNİTELERİ

### MANIFOLD

KOD	TANIM
CMC-01	P-T BLOK
CMC-05	POPET VALF+VALF BLOK+KISICI VALF

### ÇELİK TANK



KOD	KADEME	BOYUT
TS120B152-H/V	Çelik Tank - 1.7 LT	Yatay / Dikey
TS120B215-H/V	Çelik Tank - 2.8 LT	Yatay / Dikey
TS120B270-H/V	Çelik Tank - 4 LT	Yatay / Dikey
TS120C225-H/V	Çelik Tank - 4 LT	Yatay / Dikey
TS120C270-H/V	Çelik Tank - 5 LT	Yatay / Dikey
TS120C290-H/V	Çelik Tank - 6 LT	Yatay / Dikey
TS120C370-H/V	Çelik Tank - 8 LT	Yatay / Dikey
TS120C440-H/V	Çelik Tank - 10 LT	Yatay / Dikey
TS120C545-H/V	Çelik Tank - 12 LT	Yatay / Dikey
TS120F290	Çelik Tank - 20 LT	Dikey
TS120F420	Çelik Tank - 30 LT	Dikey

### YEDEK PARÇA



KOD	TANIM
DCP-035/038/048	KAPLIN
FC-03/FC-04	HAVA ALMA KAPAĞI
FS-03A/FS-03B	EMİŞ FİLTRESİ
FP-02A/FP-03B	EMİŞ BORUSU
RP-02/RP-03	DÖNÜŞ HATTI FLANŞI
FM82	BAĞLANTI FLANŞI



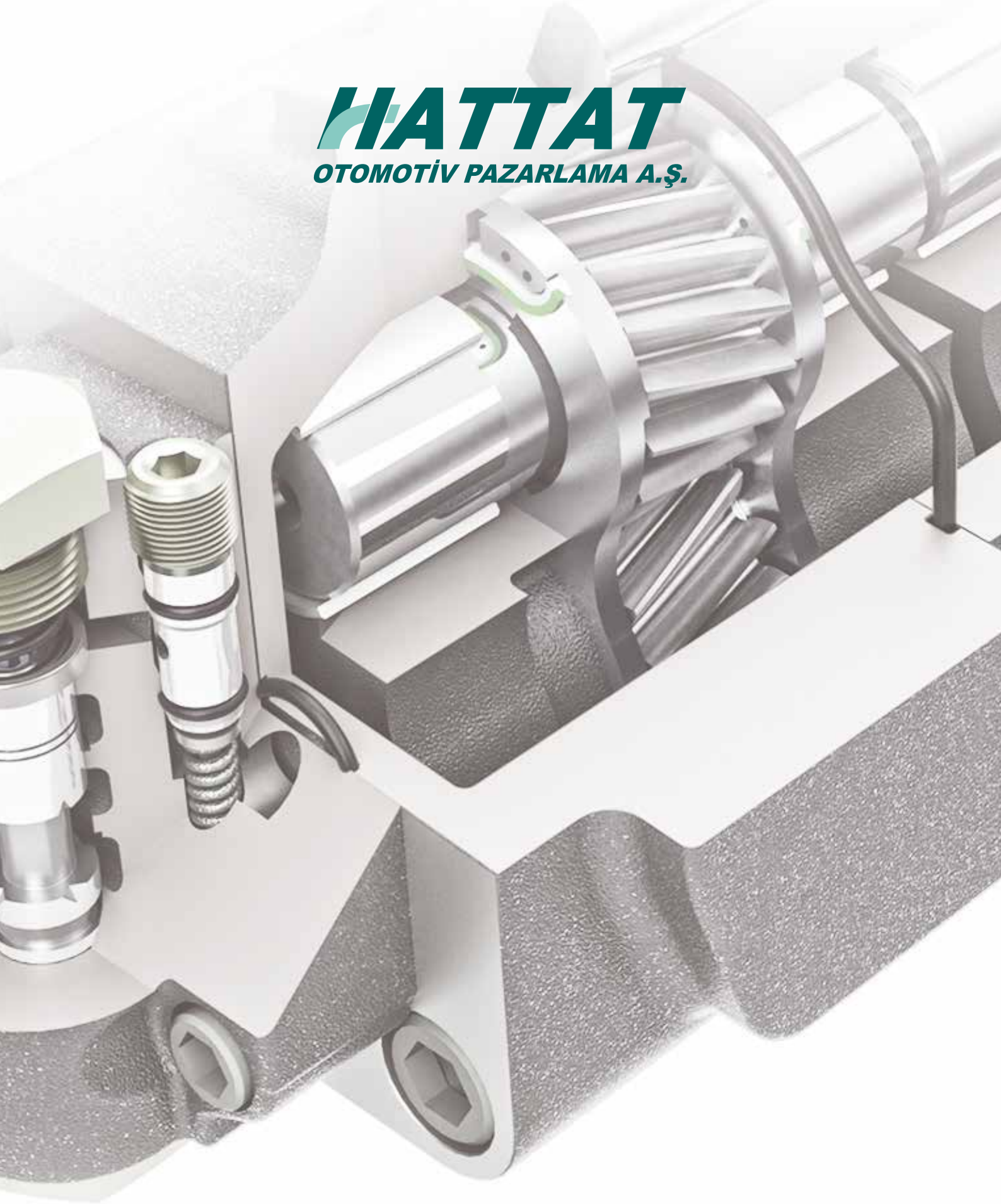
KOD	TANIM	ÖLÇÜ
FMC70	MONTAJ SETİ	70
FMC80	MONTAJ SETİ	80
FMC90	MONTAJ SETİ	90



KOD	KADEME	VOLTAJ	AMPER
DK0312	STARTER	12V DC	200 A
DK0324A	STARTER	24V DC	150 A

# HATTAT

OTOMOTİV PAZARLAMA A.Ş.



V160118

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# HYDRAULIC PRODUCT CATALOG

**HATTAT**  
OTOMOTİV PAZARLAMA A.Ş.





# INDEX

<b>ALUMINIUM ZAHNRADPUMPE ALUMINIUM GEAR PUMPS</b>	<b>7-14</b>
<b>MEHRFACHPUMPE MULTIPLE PUMPS</b>	<b>17-20</b>
<b>ALUMINIUM MOTOR SERIE ALUMINIUM MOTOR SERIES</b>	<b>23</b>
<b>GUSSEISERNE PUMPEN FÜR INDUSTRIELLE ANWENDUNGEN CAST IRON PUMPS FOR INDUSTRIAL IMPLEMENTS</b>	<b>27-28</b>
<b>GUSSEISEN ZAHNRADPUMPE CAST IRON GEAR PUMPS</b>	<b>31-37</b>
<b>ORBITMOTOREN ORBIT MOTORS (TORQUE MOTORS)</b>	<b>41-47</b>
<b>HYDRAULIK LENKEINHEITEN HYDROSTATIC STEERING UNIT</b>	<b>51</b>
<b>MONOBLOCK WEGENVENTILE MOBLOCK DIRECTIONAL CONTROL VALVES</b>	<b>55-56</b>
<b>HYDRAULIK KOMPAKTAGGREGATE HYDRAULIC POWER PACK</b>	<b>59-62</b>





**ALUMINIUM  
ZAHNRADPUMPE  
ALUMINIUM  
GEAR PUMPS**

**ALUMINIUM  
ZAHNRADPUMPE  
ALUMINIUM  
GEAR PUMPS**



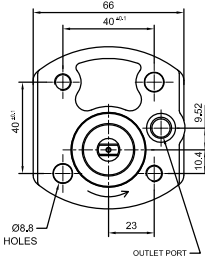




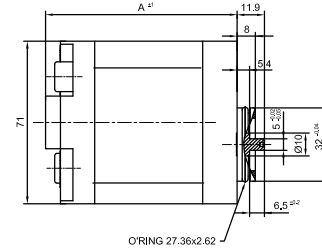


## ALUMINIUM ZAHNRADPUMPE - ALUMINIUM GEAR PUMPS

**D** 2- LOCHBEFESTIGUNG, ZENTRIERUNG Ø 32mm  
2- BOLT MOUNTING, CENTERING Ø 32mm

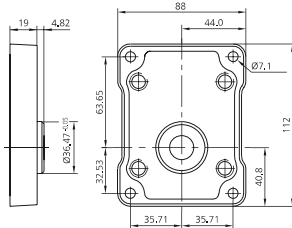


**R** ZWEIFLÄCHIG KLAUE  
TANG DRIVE SHAFT

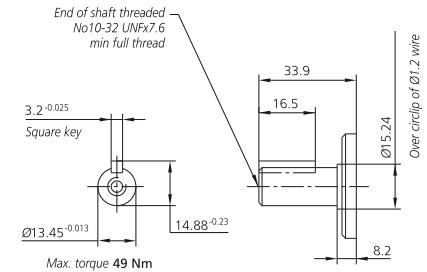


DREHRICHTUNG LINKS ROTATION ANTICLOCKWISE	DREHRICHTUNG RECHTS ROTATION CLOCKWISE	FÖRDERVOLL- MEN (cm <sup>3</sup> /U) DISPLACEMENT (cm <sup>3</sup> /rev)	ANTRIEBSWELLEN SHAFT TYPE	FRONTDECKEL MOUNTING FLANGE	DAUERDRUCK CON. PRESSURE (Bar)	SAUGAN- SCHLUSS INLET	DRUCKAN- SCHLUSS OUTLET
0.5P008ADR6	0.5P008CDR6	0,08	Drive Dog - R	D	230	3/8	Ø9 mm
0.5P011ADR6	0.5P011CDR6	1,10	Drive Dog - R	D	230	3/8	Ø9 mm
0.5P013ADR6	0.5P013CDR6	1,30	Drive Dog - R	D	230	3/8	Ø9 mm
0.5P016ADR6	0.5P016CDR6	1,60	Drive Dog - R	D	230	3/8	Ø9 mm
0.5P018ADR6	0.5P018CDR6	1,80	Drive Dog - R	D	230	3/8	Ø9 mm
0.5P021ADR6	0.5P021CDR6	2,10	Drive Dog - R	D	230	3/8	Ø9 mm
0.5P027ADR6	0.5P027CDR6	2,70	Drive Dog - R	D	230	3/8	Ø9 mm
0.5P032ADR6	0.5P032CDR6	3,20	Drive Dog - R	D	210	3/8	Ø9 mm
0.5P037ADR6	0.5P037CDR6	3,70	Drive Dog - R	D	210	3/8	Ø9 mm
0.5P042ADR6	0.5P042CDR6	4,20	Drive Dog - R	D	210	3/8	Ø9 mm
0.5P048ADR6	0.5P048CDR6	4,80	Drive Dog - R	D	190	3/8	Ø9 mm
0.5P058ADR6	0.5P058CDR6	5,80	Drive Dog - R	D	190	3/8	Ø9 mm
0.5P070ADR6	0.5P070CDR6	7,00	Drive Dog - R	D	160	3/8	Ø9 mm
0.5P080ADR6	0.5P080CDR6	8,00	Drive Dog - R	D	160	3/8	Ø9 mm

**B** RECHTECKFLANSCH  
SQUARE FLANGE



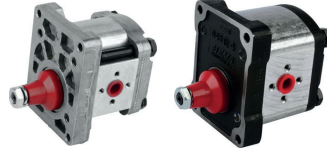
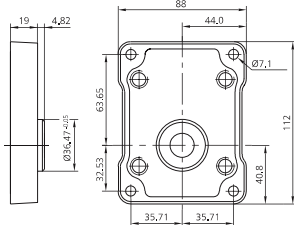
**P** ZYLINDRISCH Ø 17,46mm  
PARALLEL SHAFT Ø 17,46mm



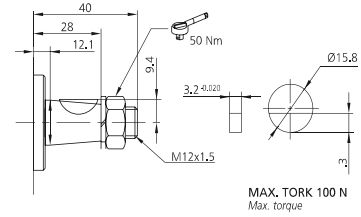
DREHRICHTUNG LINKS ROTATION ANTICLOCKWISE	DREHRICHTUNG RECHTS ROTATION CLOCKWISE	FÖRDERVOLL- MEN (cm <sup>3</sup> /U) DISPLACEMENT (cm <sup>3</sup> /rev)	ANTRIEBSWELLEN SHAFT TYPE	FRONT- DECKEL MOUNTING FLANGE	DAUERDRUCK CON. PRESSURE (Bar)	SAUGANSCHLUSS INLET	DRUCKANSCHLUSS OUTLET
OP1.103.ABP1	OP1.103.CBP1	1,20	P	B	280	35 - M6*1*12	35 - M6*1*12
OP1.104.ABP1	OP1.104.CBP1	1,60	P	B	280	35 - M6*1*12	35 - M6*1*12
OP1.106.ABP1	OP1.106.CBP1	2,20	P	B	280	35 - M6*1*12	35 - M6*1*12
OP1.108.ABP1	OP1.108.CBP1	2,80	P	B	280	35 - M6*1*12	35 - M6*1*12

## ALUMINIUM ZAHNRADPUMPE - ALUMINIUM GEAR PUMPS

### B RECHTECKFLANSCH SQUARE FLANGE



### T KONISCH 1:8 TAPPED KEY SHAFT 1:8



DREHRICHTUNG LINKS ROTATION ANTICLOCKWISE	DREHRICHTUNG RECHTS ROTATION CLOCKWISE	FÖRDERVOLUME MEN (cm <sup>3</sup> /U) DISPLACEMENT (cm <sup>3</sup> /rev)	ANTRIEBSWELLEN SHAFT TYPE	FRONTDECKEL MOUNTING FLANGE	DAUERDRUCK CON. PRESSURE (Bar)	SAUGANSCHLUSS INLET	DRUCKANSCHLUSS OUTLET
1PA.A04.AB12	1PA.A04.CB12	4,00	1/8	B	175	30 - M6*1*13	30 - M6*1*13
1PA.A06.AB12	1PA.A06.CB12	6,10	1/8	B	175	30 - M6*1*13	30 - M6*1*13
1PA.A08.AB12	1PA.A08.CB12	8,20	1/8	B	175	30 - M6*1*13	30 - M6*1*13
1PA.A09.AB12	1PA.A09.CB12	9,50	1/8	B	175	30 - M6*1*13	30 - M6*1*13
1PA.A12.AB11	1PA.A12.CB11	11,90	1/8	B	175	40 - M6*1*13	30 - M6*1*13
1PA.A15.AB11	1PA.A15.CB11	14,60	1/8	B	175	40 - M6*1*13	30 - M6*1*13
1PA.A17.AB11	1PA.A17.CB11	16,80	1/8	B	175	40 - M6*1*13	30 - M6*1*13
1PA.A19.AB11	1PA.A19.CB11	19,20	1/8	B	175	40 - M6*1*13	30 - M6*1*13
1PA.A23.AB11	1PA.A23.CB11	22,90	1/8	B	175	40 - M6*1*13	30 - M6*1*13

DREHRICHTUNG LINKS ROTATION ANTICLOCKWISE	DREHRICHTUNG RECHTS ROTATION CLOCKWISE	FÖRDERVOLUME MEN (cm <sup>3</sup> /U) DISPLACEMENT (cm <sup>3</sup> /rev)	ANTRIEBSWELLEN SHAFT TYPE	FRONTDECKEL MOUNTING FLANGE	DAUERDRUCK CON. PRESSURE (Bar)	SAUGANSCHLUSS INLET	DRUCKANSCHLUSS OUTLET
1PH.082.AB11	1PH.082.CB11	8,20	1/8	B	250	40 - M6*1*13	30 - M6*1*13
1PH.095.AB11	1PH.095.CB11	9,50	1/8	B	250	40 - M6*1*13	30 - M6*1*13
1PH.119.AB11	1PH.119.CB11	11,90	1/8	B	250	40 - M6*1*13	30 - M6*1*13
1PH.140.AB11	1PH.140.CB11	14,00	1/8	B	250	40 - M6*1*13	30 - M6*1*13
1PH.168.AB11	1PH.168.CB11	16,80	1/8	B	250	40 - M6*1*13	30 - M6*1*13
1PH.190.AB11	1PH.190.CB11	19,00	1/8	B	250	40 - M6*1*13	30 - M6*1*13
1PH.229.AB11	1PH.229.CB11	22,90	1/8	B	210	40 - M6*1*13	30 - M6*1*13
1PH.281.AB13	1PH.281.CB13	28,10	1/8	B	175	40 - M6*1*13	40 - M6*1*13

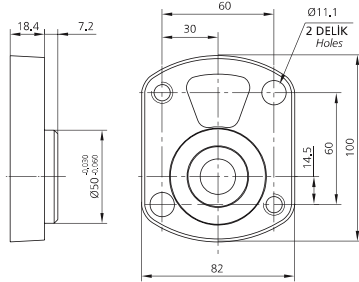
DREHRICHTUNG LINKS ROTATION ANTICLOCKWISE	DREHRICHTUNG RECHTS ROTATION CLOCKWISE	FÖRDERVOLUME MEN (cm <sup>3</sup> /U) DISPLACEMENT (cm <sup>3</sup> /rev)	ANTRIEBSWELLEN SHAFT TYPE	FRONTDECKEL MOUNTING FLANGE	DAUERDRUCK CON. PRESSURE (Bar)	SAUGANSCHLUSS INLET	DRUCKANSCHLUSS OUTLET
1PN.039.AB15	1PN.039.CB15	3,90	1/8	B	250	30 - M6*1*13	30 - M6*1*13
1PN.061.AB2	1PN.061.CB2	6,10	1/8	B	250	35 - M6*1*13	35 - M6*1*13
1PN.060.AB15	1PN.060.CB15	6,00	1/8	B	250	30 - M6*1*13	30 - M6*1*13
1PN.082.AB12	1PN.082.CB12	8,20	1/8	B	250	30 - M6*1*13	30 - M6*1*13
1PN.095.AB6	1PN.095.CB6	9,50	1/8	B	250	40 - M6*1*13	30 - M6*1*13
1PN.095.AB15	1PN.095.CB15	9,50	1/8	B	250	30 - M6*1*13	30 - M6*1*13
1PN.119.AB11	1PN.119.CB11	11,90	1/8	B	250	30 - M6*1*13	30 - M6*1*13
1PN.140.AB11	1PN.140.CB11	14,00	1/8	B	250	30 - M6*1*13	30 - M6*1*13
1PN.146.AB11	1PN.146.CB11	14,60	1/8	B	250	40 - M6*1*13	30 - M6*1*13
1PN.168.AB11	1PN.168.CB11	16,80	1/8	B	250	40 - M6*1*13	30 - M6*1*13
1PN.192.AB11	1PN.192.CB11	19,20	1/8	B	250	40 - M6*1*13	30 - M6*1*13
1PN.229.AB11	1PN.229.CB11	22,90	1/8	B	210	40 - M6*1*13	30 - M6*1*13
1PN.250.AB11	1PN.250.CB11	25	1/8	B	210	40-M6*1*13	30-M6*1*13
1PN.281.AB13	1PN.281.CB13	28,10	1/8	B	175	40 - M6*1*13	40 - M6*1*13



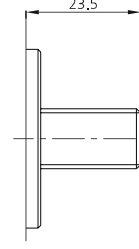


## ALUMINIUM ZAHNRADPUMPE - ALUMINIUM GEAR PUMPS

**F** 2- LOCHBEFESTIGUNG, ZENTRIERUNG Ø 50mm  
2- BOLT MOUNTING, CENTERING Ø 50mm



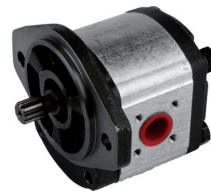
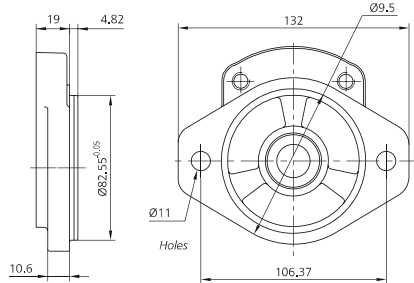
**S** ZAHNWELLE  
SPLINE SHAFT (DIN 5482 B17x14 9T)



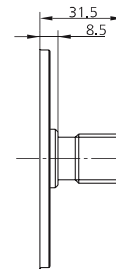
Max. torque 115 Nm

DREHRICHTUNG LINKS ROTATION ANTICLOCKWISE	DREHRICHTUNG RECHTS ROTATION CLOCKWISE	FÖRDERVOLL- MEN (cm <sup>3</sup> /U) DISPLACEMENT (cm <sup>3</sup> /rev)	ANTRIEBSWELLEN SHAFT TYPE	FRONT- DECKEL MOUNTING FLANGE	DAUERDRUCK CON. PRES- SURE (Bar)	SAUGANSCHLUSS INLET	DRUCKANSCHLUSS OUTLET
1PN040AFS3	1PN040CFS3	4,00	DIN 5482 9Teeth/16,5	F	250	40 - M6*1*13	35 - M6*1*13
1PN061AFS3	1PN061CFS3	6,10	DIN 5482 9Teeth/16,5	F	250	40 - M6*1*13	35 - M6*1*13
1PN082AFS3	1PN082CFS3	8,20	DIN 5482 9Teeth/16,5	F	250	40 - M6*1*13	35 - M6*1*13
1PN095AFS3	1PN095CFS3	9,50	DIN 5482 9Teeth/16,5	F	250	40 - M6*1*13	35 - M6*1*13
1PN119AFS3	1PN119CFS3	11,90	DIN 5482 9Teeth/16,5	F	250	40 - M6*1*13	35 - M6*1*13
1PN140AFS3	1PN140CFS3	14,00	DIN 5482 9Teeth/16,5	F	250	40 - M6*1*13	35 - M6*1*13
1PN168AFS3	1PN168CFS3	16,80	DIN 5482 9Teeth/16,5	F	250	40 - M6*1*13	35 - M6*1*13
1PN229AFS3	1PN229CFS3	22,90	DIN 5482 9Teeth/16,5	F	210	40 - M6*1*13	35 - M6*1*13
1PN281AFS3	1PN281CFS3	28,10	DIN 5482 9Teeth/16,5	F	175	40 - M6*1*13	35 - M6*1*13

**G** 2- LOCHBEFESTIGUNG, ZENTRIERUNG Ø 82,55mm  
2- BOLT MOUNTING, CENTERING Ø 82,55mm  
(SAE J 744 82-2 A)



**S** ZAHNWELLE  
SAE A SPLINE SHAFT (SAE J 744 16-4 9T)



SAE 16-4 (A) 5/8\"/>

Involute spline  
Flat root side fit  
9 Teeth, 16/32 DP

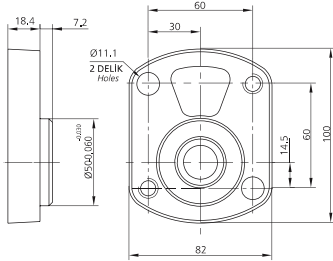
Max. torque 85 Nm

DREHRICHTUNG LINKS ROTATION ANTICLOCKWISE	DREHRICHTUNG RECHTS ROTATION CLOCKWISE	FÖRDERVOLL- MEN (cm <sup>3</sup> /U) DISPLACEMENT (cm <sup>3</sup> /rev)	ANTRIEBSWELLEN SHAFT TYPE	FRONT- DECKEL MOUNTING FLANGE	DAUERDRUCK CON. PRES- SURE (Bar)	SAUGANSCHLUSS INLET	DRUCKANSCHLUSS OUTLET
1PN040AGS3	1PN040CGS3	4,00	SAE 16-4 9Teeth/15,5	G SAE A	250	40 - M6*1*13	35 - M6*1*13
1PN061AGS3	1PN061CGS3	6,10	SAE 16-4 9Teeth/15,5	G SAE A	250	40 - M6*1*13	35 - M6*1*13
1PN082AGS3	1PN082CGS3	8,20	SAE 16-4 9Teeth/15,5	G SAE A	250	40 - M6*1*13	35 - M6*1*13
1PN095AGS3	1PN095CGS3	9,50	SAE 16-4 9Teeth/15,5	G SAE A	250	40 - M6*1*13	35 - M6*1*13
1PN119AGS3	1PN119CGS3	11,90	SAE 16-4 9Teeth/15,5	G SAE A	250	40 - M6*1*13	35 - M6*1*13
1PN140AGS3	1PN140CGS3	14,00	SAE 16-4 9Teeth/15,5	G SAE A	250	40 - M6*1*13	35 - M6*1*13
1PN168AGS3	1PN168CGS3	16,80	SAE 16-4 9Teeth/15,5	G SAE A	250	40 - M6*1*13	35 - M6*1*13
1PN192AGS3	1PN192CGS3	19,20	SAE 16-4 9Teeth/15,5	G SAE A	250	40 - M6*1*13	35 - M6*1*13
1PN229AGS3	1PN229CGS3	22,90	SAE 16-4 9Teeth/15,5	G SAE A	210	40 - M6*1*13	35 - M6*1*13
1PN281AGS3	1PN281CGS3	28,10	SAE 16-4 9Teeth/15,5	G SAE A	175	40 - M6*1*13	35 - M6*1*13

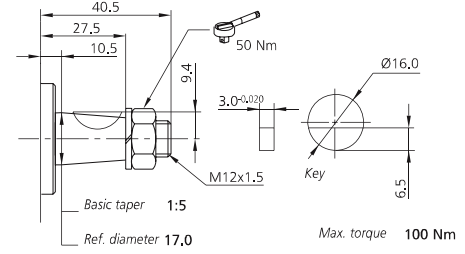


## ALUMINIUM ZAHNRADPUMPE - ALUMINIUM GEAR PUMPS

**J** 2- LOCHBEFESTIGUNG, ZENTRIERUNG Ø 50mm  
2- BOLT MOUNTING, CENTERING Ø 50mm

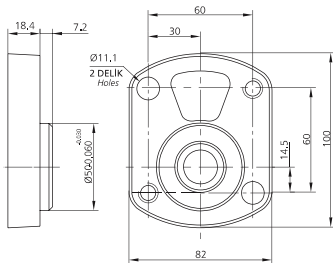


**T** KONISCH 1:5  
TAPERED KEY SHAFT 1:5

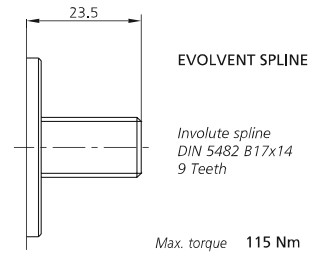


DREHRICHTUNG LINKS ROTATION ANTICLOCKWISE	DREHRICHTUNG RECHTS ROTATION CLOCKWISE	FÖRDERVOLUMEN (cm <sup>3</sup> /U) DISPLACEMENT (cm <sup>3</sup> /rev)	ANTRIEBSWELLEN SHAFT TYPE	FRONT- DECKEL MOUNTING FLANGE	DAUERDRUCK CON. PRES- SURE (Bar)	SAUGANSCHLUSS INLET	DRUCKANSCHLUSS OUTLET
1PN.040.AJT3	1PN.040.CJT3	4,00	1/5	J	250	40 - M6*1*13	35 - M6*1*13
1PN.061.AJT3	1PN.061.CJT3	6,10	1/5	J	250	40 - M6*1*13	35 - M6*1*13
1PN.082.AJT3	1PN.082.CJT3	8,20	1/5	J	250	40 - M6*1*13	35 - M6*1*13
1PN.095.AJT3	1PN.095.CJT3	9,50	1/5	J	250	40 - M6*1*13	35 - M6*1*13
1PN.119.AJT3	1PN.119.CJT3	11,90	1/5	J	250	40 - M6*1*13	35 - M6*1*13
1PN.140.AJT3	1PN.140.CJT3	14,00	1/5	J	250	40 - M6*1*13	35 - M6*1*13
1PN.168.AJT3	1PN.168.CJT3	16,80	1/5	J	250	40 - M6*1*13	35 - M6*1*13
1PN.192.AJT3	1PN.192.CJT3	19,20	1/5	J	250	40 - M6*1*13	35 - M6*1*13
1PN.229.AJT3	1PN.229.CJT3	22,90	1/5	J	210	40 - M6*1*13	35 - M6*1*13
1PN.281.AJT3	1PN.281.CJT3	28,10	1/5	J	175	40 - M6*1*13	35 - M6*1*13

**J** 2- LOCHBEFESTIGUNG, ZENTRIERUNG Ø 50mm  
2- BOLT MOUNTING, CENTERING Ø 50mm



**S** ZAHNWELLE  
SPLINE SHAFT (DIN 5482 B17x14 9T)

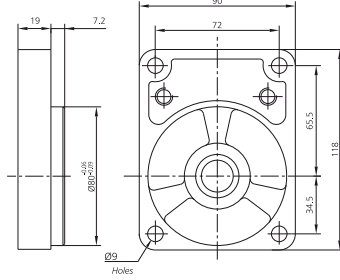


DREHRICHTUNG LINKS ROTATION ANTICLOCKWISE	DREHRICHTUNG RECHTS ROTATION CLOCKWISE	FÖRDERVOLUMEN (cm <sup>3</sup> /U) DISPLACEMENT (cm <sup>3</sup> /rev)	ANTRIEBSWELLEN SHAFT TYPE	FRONT- DECKEL MOUNTING FLANGE	DAUERDRUCK CON. PRES- SURE (Bar)	SAUGANSCHLUSS INLET	DRUCKANSCHLUSS OUTLET
1PN040AJS3	1PN040CJS3	4,00	DIN 5482 9Teeth/16,5	J	250	40 - M6*1*13	35 - M6*1*13
1PN061AJS3	1PN061CJS3	6,10	DIN 5482 9Teeth/16,5	J	250	40 - M6*1*13	35 - M6*1*13
1PN082AJS3	1PN082CJS3	8,20	DIN 5482 9Teeth/16,5	J	250	40 - M6*1*13	35 - M6*1*13
1PN095AJS3	1PN095CJS3	9,50	DIN 5482 9Teeth/16,5	J	250	40 - M6*1*13	35 - M6*1*13
1PN119AJS3	1PN119CJS3	11,90	DIN 5482 9Teeth/16,5	J	250	40 - M6*1*13	35 - M6*1*13
1PN140AJS3	1PN140CJS3	14,00	DIN 5482 9Teeth/16,5	J	250	40 - M6*1*13	35 - M6*1*13
1PN168AJS3	1PN168CJS3	16,80	DIN 5482 9Teeth/16,5	J	250	40 - M6*1*13	35 - M6*1*13
1PN192AJS3	1PN192CJS3	19,20	DIN 5482 9Teeth/16,5	J	250	40 - M6*1*13	35 - M6*1*13
1PN229AJS3	1PN229CJS3	22,90	DIN 5482 9Teeth/16,5	J	210	40 - M6*1*13	35 - M6*1*13
1PN281AJS3	1PN281CJS3	28,10	DIN 5482 9Teeth/16,5	J	175	40 - M6*1*13	35 - M6*1*13

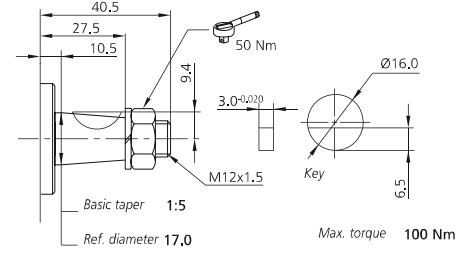


## ALUMINIUM ZAHNRADPUMPE - ALUMINIUM GEAR PUMPS

**S** ZENTRIERUNG Ø 80mm  
CENTERING Ø 80mm

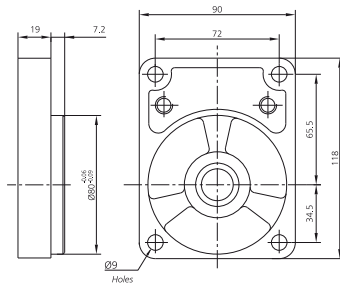


**T** KONISCH 1:5  
TAPERED KEY SHAFT 1:5

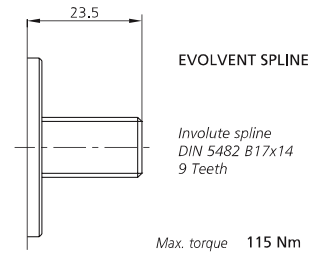


DREHRICHTUNG LINKS ROTATION ANTICLOCKWISE	DREHRICHTUNG RECHTS ROTATION CLOCKWISE	FÖRDERVOLU- MEN (cm <sup>3</sup> /U) DISPLACEMENT (cm <sup>3</sup> /rev)	ANTRIEBSWELLEN SHAFT TYPE	FRONT- DECKEL MOUNTING FLANGE	DAUERDRUCK CON. PRES- SURE (Bar)	SAUGANSCHLUSS INLET	DRUCKANSCHLUSS OUTLET
1PN040AST3	1PN040CST3	4,00	1/5	S	250	40 - M6*1*13	35 - M6*1*13
1PN061AST3	1PN061CST3	6,10	1/5	S	250	40 - M6*1*13	35 - M6*1*13
1PN082AST3	1PN082CST3	8,20	1/5	S	250	40 - M6*1*13	35 - M6*1*13
1PN095AST3	1PN095CST3	9,50	1/5	S	250	40 - M6*1*13	35 - M6*1*13
1PN119AST3	1PN119CST3	11,90	1/5	S	250	40 - M6*1*13	35 - M6*1*13
1PN140AST3	1PN140CST3	14,00	1/5	S	250	40 - M6*1*13	35 - M6*1*13
1PN168AST3	1PN168CST3	16,80	1/5	S	250	40 - M6*1*13	35 - M6*1*13
1PN168AST3	1PN168CST3	16,80	1/5	S	250	40 - M6*1*13	35 - M6*1*13
1PN192AST3	1PN192CST3	19,20	1/5	S	250	40 - M6*1*13	35 - M6*1*13
1PN229AST3	1PN229CST3	22,90	1/5	S	210	40 - M6*1*13	35 - M6*1*13
1PN281AST3	1PN281CST3	28,10	1/5	S	175	40 - M6*1*13	35 - M6*1*13

**S** ZENTRIERUNG Ø 80mm  
CENTERING Ø 80mm



**S** ZAHNWELLE  
SPLINE SHAFT (DIN 5482 B17x14 9T)

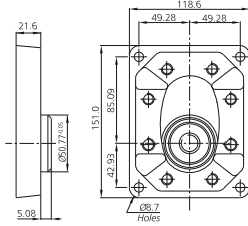


DREHRICHTUNG LINKS ROTATION ANTICLOCKWISE	DREHRICHTUNG RECHTS ROTATION CLOCKWISE	FÖRDERVOLU- MEN (cm <sup>3</sup> /U) DISPLACEMENT (cm <sup>3</sup> /rev)	ANTRIEBSWELLEN SHAFT TYPE	FRONT- DECKEL MOUNTING FLANGE	DAUERDRUCK CON. PRES- SURE (Bar)	SAUGANSCHLUSS INLET	DRUCKANSCHLUSS OUTLET
1PN040ASS3	1PN040CSS3	4,00	DIN 5482 9Teeth/16,5	S	250	40 - M6*1*13	35 - M6*1*13
1PN061ASS3	1PN061CSS3	6,10	DIN 5482 9Teeth/16,5	S	250	40 - M6*1*13	35 - M6*1*13
1PN082ASS3	1PN082CSS3	8,20	DIN 5482 9Teeth/16,5	S	250	40 - M6*1*13	35 - M6*1*13
1PN095ASS3	1PN095CSS3	9,50	DIN 5482 9Teeth/16,5	S	250	40 - M6*1*13	35 - M6*1*13
1PN119ASS3	1PN119CSS3	11,90	DIN 5482 9Teeth/16,5	S	250	40 - M6*1*13	35 - M6*1*13
1PN140ASS3	1PN140CSS3	14,00	DIN 5482 9Teeth/16,5	S	250	40 - M6*1*13	35 - M6*1*13
1PN168ASS3	1PN168CSS3	16,80	DIN 5482 9Teeth/16,5	S	250	40 - M6*1*13	35 - M6*1*13
1PN192ASS3	1PN192CSS3	19,20	DIN 5482 9Teeth/16,5	S	250	40 - M6*1*13	35 - M6*1*13
1PN192AFS3	1PN192AFS3	19,20	DIN 5482 9Teeth/16,5	S	250	40 - M6*1*13	35 - M6*1*13
1PN229ASS3	1PN229CSS3	22,90	DIN 5482 9Teeth/16,5	S	210	40 - M6*1*13	35 - M6*1*13
1PN281ASS3	1PN281CSS3	28,10	DIN 5482 9Teeth/16,5	S	175	40 - M6*1*13	35 - M6*1*13

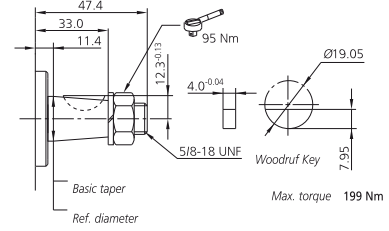


## ALUMINIUM ZAHNRADPUMPE - ALUMINIUM GEAR PUMPS

### B RECHTECKFLANSCH SQUARE FLANGE

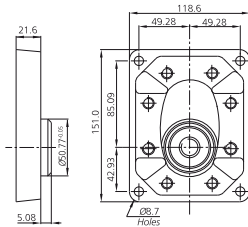


### T KONISCH 1:8 TAPERED KEY SHAFT 1:8

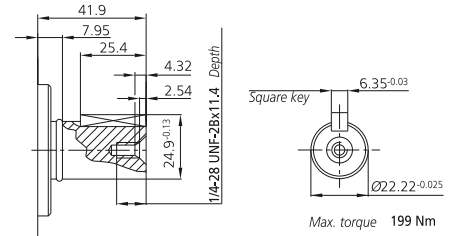


DREHRICHTUNG LINKS ROTATION ANTICLOCKWISE	DREHRICHTUNG RECHTS ROTATION CLOCKWISE	FÖRDERVOLUMEN (cm <sup>3</sup> /U) DISPLACEMENT (cm <sup>3</sup> /rev)	ANTRIEBSWELLEN SHAFT TYPE	FRONT- DECKEL MOUNTING FLANGE	DAUERDRUCK CON. PRES- SURE (Bar)	SAUGANSCHLUSS INLET	DRUCKANSCHLUSS OUTLET
2P13070AB7	2P13070CB7	22,70	1/8	B	250	51 - M10*1,5*13	40 - M8*1,25*13
2P13090AB7	2P13090CB7	28,80	1/8	B	250	51 - M10*1,5*13	40 - M8*1,25*13
2P1.3105.AB7	2P1.3105.CB7	33,30	1/8	B	250	51 - M10*1,5*13	40 - M8*1,25*13
2P1.3120.AB7	2P1.3120.CB7	37,80	1/8	B	210	51 - M10*1,5*13	40 - M8*1,25*13
2P1.3135.AB7	2P1.3135.CB7	42,60	1/8	B	210	51 - M10*1,5*13	40 - M8*1,25*13
2P13146AB7	2P13146CB7	45,40	1/8	B	210	51 - M10*1,5*13	40 - M8*1,25*13
2P1.3158SAB7	2P1.3158SCB7	49,40	1/8	B	210	51 - M10*1,5*13	40 - M8*1,25*13
2P1.3180SAB7	2P1.3180SCB7	56,10	1/8	B	175	51 - M10*1,5*13	40 - M8*1,25*13

### B RECHTECKFLANSCH SQUARE FLANGE



### P ZYLINDRISCH Ø 17,46mm PARALLEL SHAFT Ø 17,46mm



DREHRICHTUNG LINKS ROTATION ANTICLOCKWISE	DREHRICHTUNG RECHTS ROTATION CLOCKWISE	FÖRDERVOLUMEN (cm <sup>3</sup> /U) DISPLACEMENT (cm <sup>3</sup> /rev)	AN- TRIEBSWEL- LEN SHAFT TYPE	FRONT- DECKEL MOUNTING FLANGE	DAUERDRUCK CON. PRES- SURE (Bar)	SAUGANSCHLUSS INLET	DRUCKANSCHLUSS OUTLET
2P1.3105SABP1	2P1.3105SCBP1	33,30	P	B	250	48 - M8*1,25*13	48 - M8*1,25*13
2P1.3120SABP1	2P1.3120SCBP1	37,80	P	B	210	48 - M8*1,25*13	48 - M8*1,25*13
2P1.3135SABP1	2P1.3135SCBP1	42,60	P	B	210	48 - M8*1,25*13	48 - M8*1,25*13
2P1.3146SABP1	2P1.3146SCBP1	45,40	P	B	210	48 - M8*1,25*13	48 - M8*1,25*13
2P1.3158SABP1	2P1.3158SCBP1	49,40	P	B	210	48 - M8*1,25*13	48 - M8*1,25*13
2P1.3180SABP1	2P1.3180SCBP1	56,10	P	B	175	48 - M8*1,25*13	48 - M8*1,25*13

DREHRICHTUNG LINKS ROTATION ANTICLOCKWISE	DREHRICHTUNG RECHTS ROTATION CLOCK- WISE	FÖRDERVOLUMEN (cm <sup>3</sup> /U) DISPLACEMENT (cm <sup>3</sup> /rev)	AN- TRIEBSWEL- LEN SHAFT TYPE	FRONT- DECKEL MOUNTING FLANGE	DAUERDRUCK CON. PRES- SURE (Bar)	SAUGANSCHLUSS INLET	DRUCKANSCHLUSS OUTLET
3P1.4150SABP	3P1.4150SCBP	47,00	P	B	248	69,85*35,71 - M12*1,75*30	52,32*26,21 - M10*1,5*30
3P1.4180SABP	3P1.4180SCBP	56,10	P	B	248	69,85*35,71 - M12*1,75*30	52,32*26,21 - M10*1,5*30
3P1.4210SABP	3P1.4210SCBP	65,10	P	B	248	69,85*35,71 - M12*1,75*30	52,32*26,21 - M10*1,5*30
3P1.4250SABP	3P1.4250SCBP	77,00	P	B	248	69,85*35,71 - M12*1,75*30	52,32*26,21 - M10*1,5*30
3P1.4300SABP	3P1.4300SCBP	91,90	P	B	207	69,85*35,71 - M12*1,75*30	52,32*26,21 - M10*1,5*30
3P1.4330SABP	3P1.4330SCBP	101,50	P	B	193	69,85*35,71 - M12*1,75*30	52,32*26,21 - M10*1,5*30
3P1.4380SABP	3P1.4380SCBP	116,70	P	B	172	69,85*35,71 - M12*1,75*30	52,32*26,21 - M10*1,5*30

**MEHRFACHPUMPE**  
**MULTIPLE**  
**PUMPS**

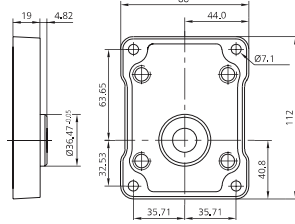
**MEHRFACHPUMPE**  
**MULTIPLE PUMPS**



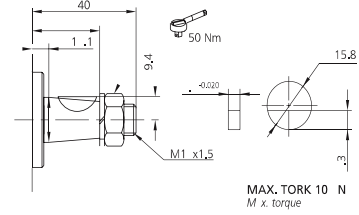


## MEHRFACHPUMPE - MULTIPLE PUMPS

### B RECHTECKFLANSCH SQUARE FLANGE



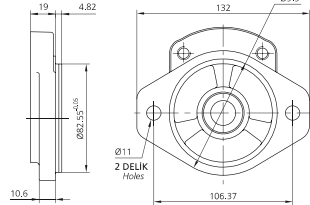
### T KONISCH 1:8 TAPERED KEY SHAFT 1:8



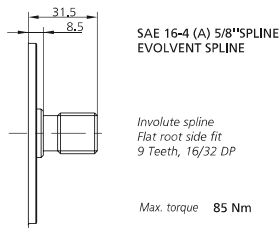
### Frontpumpe - Front Pump

DREHRICHTUNG LINKS ROTATION ANTICLOCKWISE	DREHRICHTUNG RECHTS ROTATION CLOCKWISE	FÖRDERVOLUMEN (cm <sup>3</sup> /U) DISPLACEMENT (cm <sup>3</sup> /rev)	ANTRIEBSWELLEN SHAFT TYPE	FRONTDECKEL MOUNTING FLANGE	DAUERDRUCK CON. PRESSURE (Bar)	SAUGANSCHLUSS INLET	DRUCKANSCHLUSS OUTLET
F1PN040AB12	F1PN040CB12	4,00	1/8	B	250	30 - M6*1*13	30 - M6*1*13
F1PN061AB12	F1PN061CB12	6,10	1/8	B	250	30 - M6*1*13	30 - M6*1*13
F1PN082AB12	F1PN082CB12	8,20	1/8	B	250	30 - M6*1*13	30 - M6*1*13
F1PN095AB12	F1PN095CB12	9,50	1/8	B	250	30 - M6*1*13	30 - M6*1*13
F1PN119AB11	F1PN119CB11	11,90	1/8	B	250	40 - M6*1*13	30 - M6*1*13
F1PN140AB11	F1PN140CB11	14,00	1/8	B	250	40 - M6*1*13	30 - M6*1*13
F1PN168AB11	F1PN168CB11	16,80	1/8	B	250	40 - M6*1*13	30 - M6*1*13
F1PN192AB11	F1PN192CB11	19,20	1/8	B	250	40 - M6*1*13	30 - M6*1*13
F1PN229AB11	F1PN229CB11	22,90	1/8	B	210	40 - M6*1*13	30 - M6*1*13
F1PN281AB13	F1PN281CB13	28,10	1/8	B	175	40 - M6*1*13	40 - M6*1*13

### G 2- LOCHBEFESTIGUNG, ZENTRIERUNG Ø 82,55mm 2- BOLT MOUNTING, CENTERING Ø 82,55mm (SAE J 744 82-2 A)



### S ZAHNWELLE SAE A SPLINE SHAFT (SAE J 744 16-4 9T)



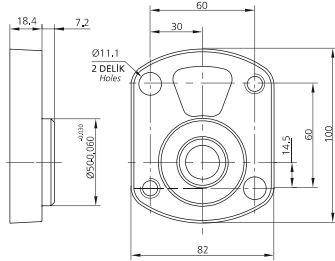
### Frontpumpe - Front Pump

DREHRICHTUNG LINKS ROTATION ANTICLOCKWISE	DREHRICHTUNG RECHTS ROTATION CLOCKWISE	FÖRDERVOLUMEN (cm <sup>3</sup> /U) DISPLACEMENT (cm <sup>3</sup> /rev)	ANTRIEBSWELLEN SHAFT TYPE	FRONTDECKEL MOUNTING FLANGE	DAUERDRUCK CON. PRESSURE (Bar)	SAUGANSCHLUSS INLET	DRUCKANSCHLUSS OUTLET
F1PN040AGS3	F1PN040CGS3	4,00	SAE 16-4 9Teeth/15,5	G SAE A	250	40 - M6*1*13	35 - M6*1*13
F1PN061AGS3	F1PN061CGS3	6,10	SAE 16-4 9Teeth/15,5	G SAE A	250	40 - M6*1*13	35 - M6*1*13
F1PN082AGS3	F1PN082CGS3	8,20	SAE 16-4 9Teeth/15,5	G SAE A	250	40 - M6*1*13	35 - M6*1*13
F1PN095AGS3	F1PN095CGS3	9,50	SAE 16-4 9Teeth/15,5	G SAE A	250	40 - M6*1*13	35 - M6*1*13
F1PN119AGS3	F1PN119CGS3	11,90	SAE 16-4 9Teeth/15,5	G SAE A	250	40 - M6*1*13	35 - M6*1*13
F1PN140AGS3	F1PN140CGS3	14,00	SAE 16-4 9Teeth/15,5	G SAE A	250	40 - M6*1*13	35 - M6*1*13
F1PN168AGS3	F1PN168CGS3	16,80	SAE 16-4 9Teeth/15,5	G SAE A	250	40 - M6*1*13	35 - M6*1*13
F1PN192AGS3	F1PN192CGS3	19,20	SAE 16-4 9Teeth/15,5	G SAE A	250	40 - M6*1*13	35 - M6*1*13
F1PN229AGS3	F1PN229CGS3	22,90	SAE 16-4 9Teeth/15,5	G SAE A	210	40 - M6*1*13	35 - M6*1*13
F1PN281AGS3	F1PN281CGS3	28,10	SAE 16-4 9Teeth/15,5	G SAE A	175	40 - M6*1*13	35 - M6*1*13

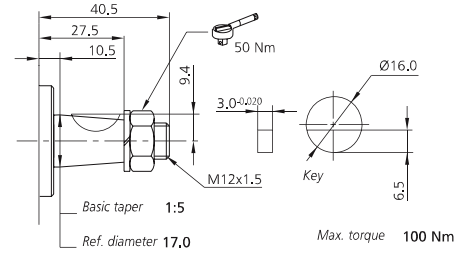


## MEHRFACHPUMPE - MULTIPLE PUMPS

**J** 2- LOCHBEFESTIGUNG, ZENTRIERUNG Ø 50mm mit O-RING  
2- BOLT MOUNTING, CENTERING Ø 50mm WITH O-RING



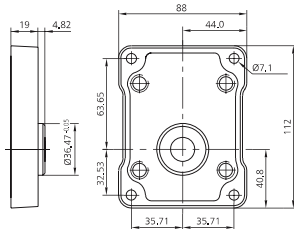
**T** KONISCH 1:5  
TAPERED KEY SHAFT 1:5



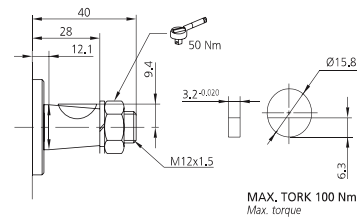
### Frontpumpe - Front Pump

DREHRICHTUNG LINKS ROTATION ANTICLOCKWISE	DREHRICHTUNG RECHTS ROTATION CLOCKWISE	FÖRDERVOLUMEN (cm <sup>3</sup> /U) DISPLACEMENT (cm <sup>3</sup> /rev)	ANTRIEBSWELLEN SHAFT TYPE	FRONT- DECKEL MOUNTING FLANGE	DAUERDRUCK CON. PRES- SURE (Bar)	SAUGANSCHLUSS INLET	DRUCKANSCHLUSS OUTLET
F1PN040AJT3	F1PN040CJT3	4,00	1/5	J	250	40 - M6*1*13	35 - M6*1*13
F1PN061AJT3	F1PN061CJT3	6,10	1/5	J	250	40 - M6*1*13	35 - M6*1*13
F1PN082AJT3	F1PN082CJT3	8,20	1/5	J	250	40 - M6*1*13	35 - M6*1*13
F1PN095AJT3	F1PN095CJT3	9,50	1/5	J	250	40 - M6*1*13	35 - M6*1*13
F1PN119AJT3	F1PN119CJT3	11,90	1/5	J	250	40 - M6*1*13	35 - M6*1*13
F1PN140AJT3	F1PN140CJT3	14,00	1/5	J	250	40 - M6*1*13	35 - M6*1*13
F1PN168AJT3	F1PN168CJT3	16,80	1/5	J	250	40 - M6*1*13	35 - M6*1*13
F1PN192AJT3	F1PN192CJT3	19,20	1/5	J	250	40 - M6*1*13	35 - M6*1*13
F1PN229AJT3	F1PN229CJT3	22,90	1/5	J	210	40 - M6*1*13	35 - M6*1*13
F1PN281AJT3	F1PN281CJT3	28,10	1/5	J	175	40 - M6*1*13	35 - M6*1*13

**B** RECHTECKFLANSCH  
SQUARE FLANGE



**T** KONISCH 1:8  
TAPERED KEY SHAFT 1:8



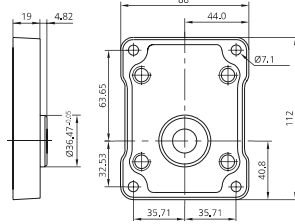
### Frontpumpe - Front Pump

DREHRICHTUNG LINKS ROTATION ANTICLOCKWISE	DREHRICHTUNG RECHTS ROTATION CLOCKWISE	FÖRDERVOLUMEN (cm <sup>3</sup> /U) DISPLACEMENT (cm <sup>3</sup> /rev)	ANTRIEBSWELLEN SHAFT TYPE	FRONT- DECKEL MOUNTING FLANGE	DAUERDRUCK CON. PRES- SURE (Bar)	SAUGANSCHLUSS INLET	DRUCKANSCHLUSS OUTLET
F2P13090AB7	F2P13090CB7	28,80	1/8	B	250	51 - M10*1,5*13	40 - M8*1,25*13
F2P13105AB7	F2P13105CB7	33,30	1/8	B	250	51 - M10*1,5*13	40 - M8*1,25*13
F2P13120AB7	F2P13120CB7	37,80	1/8	B	210	51 - M10*1,5*13	40 - M8*1,25*13
F2P13135AB7	F2P13135CB7	42,60	1/8	B	210	51 - M10*1,5*13	40 - M8*1,25*13
F2P13158AB7	F2P13158CB7	49,40	1/8	B	210	51 - M10*1,5*13	40 - M8*1,25*13
F2P13180AB7	F2P13180CB7	56,10	1/8	B	175	51 - M10*1,5*13	40 - M8*1,25*13



## MEHRFACHPUMPE - MULTIPLE PUMPS

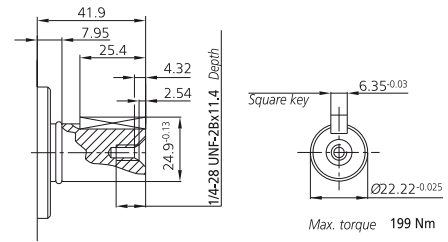
### B RECHTECKFLANSCH SQUARE FLANGE



### Frontpumpe - Front Pump

DREHRICHTUNG LINKS ROTATION ANTICLOCKWISE	DREHRICHTUNG RECHTS ROTATION CLOCKWISE	FÖRDERVOLL- MEN (cm <sup>3</sup> /U) DISPLACEMENT (cm <sup>3</sup> /rev)	ANTRIEBSWEL- LEN SHAFT TYPE	FRONT- DECKEL MOUNTING FLANGE	DAUERDRUCK CON. PRES- SURE (Bar)	SAUGANSCHLUSS INLET	DRUCKANSCHLUSS OUTLET
F2P13105ABP1	F2P13105CBP1	33,30	P	B	250	48 - M8*1,25*13	48 - M8*1,25*13
F2P13120ABP1	F2P13120CBP1	37,80	P	B	210	48 - M8*1,25*13	48 - M8*1,25*13
F2P13135ABP1	F2P13135CBP1	42,60	P	B	210	48 - M8*1,25*13	48 - M8*1,25*13
F2P13146ABP1	F2P13146CBP1	45,40	P	B	210	48 - M8*1,25*13	48 - M8*1,25*13
F2P13158ABP1	F2P13158CBP1	49,40	P	B	210	48 - M8*1,25*13	48 - M8*1,25*13
F2P13180ABP1	F2P13180CBP1	56,10	P	B	175	48 - M8*1,25*13	48 - M8*1,25*13

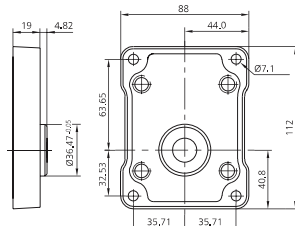
### P ZYLINDRISCH Ø 17,46mm PARALLEL SHAFT Ø 17,46mm



### Heckpumpe - Rear Pump

DREHRICHTUNG LINKS ROTATION ANTICLOCKWISE	DREHRICHTUNG RECHTS ROTATION CLOCKWISE	FÖRDERVOLL- MEN (cm <sup>3</sup> /U) DISPLACEMENT (cm <sup>3</sup> /rev)	ANTRIEBSWELLEN SHAFT TYPE	FRONTDECKEL MOUNTING FLANGE	DAUERDRUCK CON. PRES- SURE (Bar)	SAUGANSCHLUSS INLET	DRUCKANSCHLUSS OUTLET
ROP1103AX1	ROP1103CX1	1,20	SAE 14 Diş	X	280	35 - M6*1*13	35 - M6*1*13
ROP1104AX1	ROP1104CX1	1,60	SAE 14 Diş	X	280	35 - M6*1*13	35 - M6*1*13
ROP1106AX1	ROP1106CX1	2,20	SAE 14 Diş	X	280	35 - M6*1*13	35 - M6*1*13
ROP1108AX1	ROP1108CX1	2,80	SAE 14 Diş	X	280	35 - M6*1*13	35 - M6*1*13

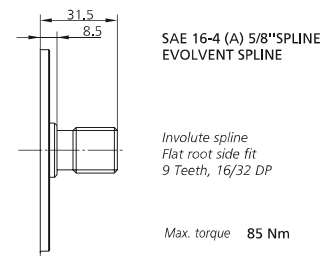
### B RECHTECKFLANSCH SQUARE FLANGE



### Heckpumpe - Rear Pump

DREHRICHTUNG LINKS ROTATION ANTICLOCKWISE	DREHRICHTUNG RECHTS ROTATION CLOCKWISE	FÖRDERVOLL- MEN (cm <sup>3</sup> /U) DISPLACEMENT (cm <sup>3</sup> /rev)	ANTRIEBSWELLEN SHAFT TYPE	FRONT- DECKEL MOUNTING FLANGE	DAUERDRUCK CON. PRESSURE (Bar)	SAUGANSCHLUSS INLET	DRUCKANSCHLUSS OUTLET
R1PN040AB12	R1PN040CB12	4,00	SAE 16-4 9Teeth/15,5	B	250	30 - M6*1*13	30 - M6*1*13
R1PN061AB12	R1PN061CB12	6,10	SAE 16-4 9Teeth/15,5	B	250	30 - M6*1*13	30 - M6*1*13
R1PN082AB12	R1PN082CB12	8,20	SAE 16-4 9Teeth/15,5	B	250	30 - M6*1*13	30 - M6*1*13
R1PN095AB12	R1PN095CB12	9,50	SAE 16-4 9Teeth/15,5	B	250	30 - M6*1*13	30 - M6*1*13
R1PN119AB11	R1PN119CB11	11,90	SAE 16-4 9Teeth/15,5	B	250	40 - M6*1*13	30 - M6*1*13
R1PN140AB11	R1PN140CB11	14,00	SAE 16-4 9Teeth/15,5	B	250	40 - M6*1*13	30 - M6*1*13
R1PN168AB11	R1PN168CB11	16,80	SAE 16-4 9Teeth/15,5	B	250	40 - M6*1*13	30 - M6*1*13
R1PN192AB11	R1PN192CB11	19,20	SAE 16-4 9Teeth/15,5	B	250	40 - M6*1*13	30 - M6*1*13
R1PN229AB11	R1PN229CB11	22,90	SAE 16-4 9Teeth/15,5	B	210	40 - M6*1*13	30 - M6*1*13
R1PN281AB13	R1PN281CB13	28,10	SAE 16-4 9Teeth/15,5	B	175	40 - M6*1*13	40 - M6*1*13

### S ZAHNWELLE SAE A SPLINE SHAFT (SAE J 744 16-4 9T)



SAE 16-4 (A) 5/8\"/>

Involute spline  
Flat root side fit  
9 Teeth, 16/32 DP

Max. torque 85 Nm



## MEHRFACHPUMPE - MULTIPLE PUMPS

### Heckpumpe - Rear Pump

DREHRICHTUNG LINKS ROTATION ANTICLOCKWISE	DREHRICHTUNG RECHTS ROTATION CLOCKWISE	FÖRDERVOLUMEN (cm <sup>3</sup> /U) DISPLACEMENT (cm <sup>3</sup> /rev)	ANTRIEBSWELLEN SHAFT TYPE	FRONT-DECKEL MOUNTING FLANGE	DAUERDRUCK CON. PRESSURE (Bar)	SAUGANSCHLUSS INLET	DRUCKANSCHLUSS OUTLET
R1PN040AX12	R1PN040CX12	4,00	SAE 14 Teeth	X	250	30 - M6*1*13	30 - M6*1*13
R1PN061AX12	R1PN061CX12	6,10	SAE 14 Teeth	X	250	30 - M6*1*13	30 - M6*1*13
R1PN082AX12	R1PN082CX12	8,20	SAE 14 Teeth	X	250	30 - M6*1*13	30 - M6*1*13
R1PN095AX12	R1PN095CX12	9,50	SAE 14 Teeth	X	250	30 - M6*1*13	30 - M6*1*13
R1PN119AX11	R1PN119CX11	11,90	SAE 14 Teeth	X	250	40 - M6*1*13	30 - M6*1*13
R1PN140AX11	R1PN140CX11	14,00	SAE 14 Teeth	X	250	40 - M6*1*13	30 - M6*1*13
R1PN168AX11	R1PN168CX11	16,80	SAE 14 Teeth	X	250	40 - M6*1*13	30 - M6*1*13
R1PN192AX11	R1PN192CX11	19,20	SAE 14 Teeth	X	250	40 - M6*1*13	30 - M6*1*13
R1PN229AX11	R1PN229CX11	22,90	SAE 14 Teeth	X	210	40 - M6*1*13	30 - M6*1*13
R1PN281AX13	R1PN281CX13	28,10	SAE 14 Teeth	X	175	40 - M6*1*13	40 - M6*1*13
R1PN040AX3	R1PN040CX3	4,00	SAE 14 Teeth	X	250	40 - M6*1*13	35 - M6*1*13
R1PN061AX3	R1PN061CX3	6,10	SAE 14 Teeth	X	250	40 - M6*1*13	35 - M6*1*13
R1PN082AX3	R1PN082CX3	8,20	SAE 14 Teeth	X	250	40 - M6*1*13	35 - M6*1*13
R1PN095AX3	R1PN095CX3	9,50	SAE 14 Teeth	X	250	40 - M6*1*13	35 - M6*1*13
R1PN119AX3	R1PN119CX3	11,90	SAE 14 Teeth	X	250	40 - M6*1*13	35 - M6*1*13
R1PN140AX3	R1PN140CX3	14,00	SAE 14 Teeth	X	250	40 - M6*1*13	35 - M6*1*13
R1PN168AX3	R1PN168CX3	16,80	SAE 14 Teeth	X	250	40 - M6*1*13	35 - M6*1*13
R1PN192AX3	R1PN192CX3	19,20	SAE 14 Teeth	X	250	40 - M6*1*13	35 - M6*1*13
R1PN229AX3	R1PN229CX3	22,90	SAE 14 Teeth	X	210	40 - M6*1*13	35 - M6*1*13
R1PN281AX3	R1PN281CX3	28,10	SAE 14 Teeth	X	175	40 - M6*1*13	35 - M6*1*13

### Mittelpumpe - Intermediate Pump

DREHRICHTUNG LINKS ROTATION ANTICLOCKWISE	DREHRICHTUNG RECHTS ROTATION CLOCKWISE	FÖRDERVOLUMEN (cm <sup>3</sup> /U) DISPLACEMENT (cm <sup>3</sup> /rev)	ANTRIEBSWELLEN SHAFT TYPE	FRONT-DECKEL MOUNTING FLANGE	DAUERDRUCK CON. PRESSURE (Bar)	SAUGANSCHLUSS INLET	DRUCKANSCHLUSS OUTLET
T1PN040AX12	T1PN040CX12	4,00	SAE 14 Teeth	X	250	30 - M6*1*13	30 - M6*1*13
T1PN061AX12	T1PN061CX12	6,10	SAE 14 Teeth	X	250	30 - M6*1*13	30 - M6*1*13
T1PN082AX12	T1PN082CX12	8,20	SAE 14 Teeth	X	250	30 - M6*1*13	30 - M6*1*13
T1PN095AX12	T1PN095CX12	9,50	SAE 14 Teeth	X	250	30 - M6*1*13	30 - M6*1*13
T1PN119AX11	T1PN119CX11	11,90	SAE 14 Teeth	X	250	40 - M6*1*13	30 - M6*1*13
T1PN140AX11	T1PN140CX11	14,00	SAE 14 Teeth	X	250	40 - M6*1*13	30 - M6*1*13
T1PN168AX11	T1PN168CX11	16,80	SAE 14 Teeth	X	250	40 - M6*1*13	30 - M6*1*13
T1PN192AX11	T1PN192CX11	19,20	SAE 14 Teeth	X	250	40 - M6*1*13	30 - M6*1*13
T1PN229AX11	T1PN229CX11	22,90	SAE 14 Teeth	X	210	40 - M6*1*13	30 - M6*1*13
T1PN281AX13	T1PN281CX13	28,10	SAE 14 Teeth	X	175	40 - M6*1*13	40 - M6*1*13
T1PN040AX3	T1PN040CX3	4,00	SAE 14 Teeth	X	250	40 - M6*1*13	35 - M6*1*13
T1PN061AX3	T1PN061CX3	6,10	SAE 14 Teeth	X	250	40 - M6*1*13	35 - M6*1*13
T1PN082AX3	T1PN082CX3	8,20	SAE 14 Teeth	X	250	40 - M6*1*13	35 - M6*1*13
T1PN095AX3	T1PN095CX3	9,50	SAE 14 Teeth	X	250	40 - M6*1*13	35 - M6*1*13
T1PN119AX3	T1PN119CX3	11,90	SAE 14 Teeth	X	250	40 - M6*1*13	35 - M6*1*13
T1PN140AX3	T1PN140CX3	14,00	SAE 14 Teeth	X	250	40 - M6*1*13	35 - M6*1*13
T1PN168AX3	T1PN168CX3	16,80	SAE 14 Teeth	X	250	40 - M6*1*13	35 - M6*1*13
T1PN192AX3	T1PN192CX3	19,20	SAE 14 Teeth	X	250	40 - M6*1*13	35 - M6*1*13
T1PN229AX3	T1PN229CX3	22,90	SAE 14 Teeth	X	210	40 - M6*1*13	35 - M6*1*13
T1PN281AX3	T1PN281CX3	28,10	SAE 14 Teeth	X	175	40 - M6*1*13	35 - M6*1*13

ALUMINIUM  
MOTOR SERIE  
ALUMINUM  
MOTOR SERIES

**ALUMINIUM  
MOTOR SERIE  
ALUMINUM  
MOTOR SERIES**





## ALUMINIUM MOTOR SERIE - ALUMINUM MOTOR SERIES

CODE	FÖRDERVOLUMEN DISPLACEMENT (cm/rev)	ANTRIEBSWELLEN SHAFT TYPE	FRONTDECKEL MOUNTING FLANGE	DAUERDRUCK CON. PRES-SURE(Bar)	SAUGANSCHLESS INLET	DRUCKANSCHLUSS OUTLET
1MN061001M	6,10	1/8	B	250	30 - M6*4	30 - M6*4
1MN082001M	8,20	1/8	B	250	30 - M6*4	30 - M6*4
1MN095001M	9,50	1/8	B	250	30 - M6*4	30 - M6*4
1MN105001M	10,50	1/8	B	250	30 - M6*4	30 - M6*4
1MN119001M	11,90	1/8	B	250	30 - M6*4	30 - M6*4
1MN126001M	12,60	1/8	B	250	30 - M6*4	30 - M6*4
1MN140001M	14,00	1/8	B	250	30 - M6*4	30 - M6*4
1MN168001M	16,80	1/8	B	250	30 - M6*4	30 - M6*4
1MN192001M	19,20	1/8	B	220	40 - M8*4	40 - M8*4
1MN229001M	22,90	1/8	B	200	40 - M8*4	40 - M8*4
1MN260001M	26,00	1/8	B	180	40 - M8*4	40 - M8*4
1MN061002M	6,10	1/5	B	250	30 - M6*4	30 - M6*4
1MN082002M	8,20	1/5	B	250	30 - M6*4	30 - M6*4
1MN095002M	9,50	1/5	B	250	30 - M6*4	30 - M6*4
1MN105002M	10,50	1/5	B	250	30 - M6*4	30 - M6*4
1MN119002M	11,90	1/5	B	250	30 - M6*4	30 - M6*4
1MN126002M	12,60	1/5	B	250	30 - M6*4	30 - M6*4
1MN140002M	14,00	1/5	B	250	30 - M6*4	30 - M6*4
1MN168002M	16,80	1/5	B	250	30 - M6*4	30 - M6*4
1MN192002M	19,20	1/5	B	220	40 - M8*4	40 - M8*4
1MN229002M	22,90	1/5	B	200	40 - M8*4	40 - M8*4
1MN260002M	26,00	1/5	B	180	40 - M8*4	40 - M8*4
1MN061003M	6,10	1/5	S	250	30 - M6*4	30 - M6*4
1MN082003M	8,20	1/5	S	250	30 - M6*4	30 - M6*4
1MN095003M	9,50	1/5	S	250	30 - M6*4	30 - M6*4
1MN105003M	10,50	1/5	S	250	30 - M6*4	30 - M6*4
1MN119003M	11,90	1/5	S	250	30 - M6*4	30 - M6*4
1MN126003M	12,60	1/5	S	250	30 - M6*4	30 - M6*4
1MN140003M	14,00	1/5	S	250	30 - M6*4	30 - M6*4
1MN168003M	16,80	1/5	S	250	30 - M6*4	30 - M6*4
1MN192003M	19,20	1/5	S	220	40 - M8*4	40 - M8*4
1MN229003M	22,90	1/5	S	200	40 - M8*4	40 - M8*4
1MN260003M	26,00	1/5	S	180	40 - M8*4	40 - M8*4
1MN061004M	6,10	SAE 16-4 9 Teeth/15,5	G SAE A	250	SAE 10 7/8-14 UNF	SAE 10 7/8-14 UNF
1MN082004M	8,20	SAE 16-4 9 Teeth/15,5	G SAE A	250	SAE 10 7/8-14 UNF	SAE 10 7/8-14 UNF
1MN095004M	9,50	SAE 16-4 9 Teeth/15,5	G SAE A	250	SAE 10 7/8-14 UNF	SAE 10 7/8-14 UNF
1MN105004M	10,50	SAE 16-4 9 Teeth/15,5	G SAE A	250	SAE 10 7/8-14 UNF	SAE 10 7/8-14 UNF
1MN119004M	11,90	SAE 16-4 9 Teeth/15,5	G SAE A	250	SAE 10 7/8-14 UNF	SAE 10 7/8-14 UNF
1MN126004M	12,60	SAE 16-4 9 Teeth/15,5	G SAE A	250	SAE 10 7/8-14 UNF	SAE 10 7/8-14 UNF
1MN140004M	14,00	SAE 16-4 9 Teeth/15,5	G SAE A	250	SAE 10 7/8-14 UNF	SAE 10 7/8-14 UNF
1MN168004M	16,80	SAE 16-4 9 Teeth/15,5	G SAE A	250	SAE 10 7/8-14 UNF	SAE 10 7/8-14 UNF
1MN192004M	19,20	SAE 16-4 9 Teeth/15,5	G SAE A	220	SAE 12 1/1-16 UNF	SAE 12 1/1-16 UNF
1MN229004M	22,90	SAE 16-4 9 Teeth/15,5	G SAE A	200	SAE 12 1/1-16 UNF	SAE 12 1/1-16 UNF
1MN260004M	26,00	SAE 16-4 9 Teeth/15,5	G SAE A	180	SAE 12 1/1-16 UNF	SAE 12 1/1-16 UNF





**GUSSEISERNE PUMPEN  
FÜR INDUSTRIELLE  
ANWENDUNGEN  
CAST IRON PUMPS FOR  
INDUSTRIAL IMPLEMENTS**

**GUSSEISERNE PUMPEN  
FÜR INDUSTRIELLE  
ANWENDUNGEN  
CAST IRON PUMPS FOR  
INDUSTRIAL IMPLEMENTS**



## GUSSEISERNE PUMPEN FÜR INDUSTRIELLE ANWENDUNGEN CAST IRON PUMPS FOR INDUSTRIAL IMPLEMENTS

### B TYPE RECTANGLE FLANGE / TAPERED KEY SHAFT 1:8

PUMPE TYPE PUMP TYPE		FÖRDERVOLL- MEN (cm <sup>3</sup> /U) DISPLACEMENT (cm <sup>3</sup> /rev)	BETRIEBSDRUCK CON. PRESSURE (bar)	SPITZENDRUCK PEAK PRESSURE (bar)	MIN/MAX DEVİR (dev/dk)	SAUGANSCHLESS INLET	DRUCKANSCHLUSS OUTLET
DREHRICH- TUNG LINKS ROTATION AN- TICLOCKWISE	DREHRICH- TUNG LINKS ROTATION CLOCKWISE						
HPR41086	HPR41087	16	250	280	450/3000	51-M10*1,5*13	40-M8*1,25*13
HPR41088	HPR41089	19	250	280	450/3000	51-M10*1,5*13	40-M8*1,25*13
HPR41090	HPR41091	23	250	280	450/3000	51-M10*1,5*13	40-M8*1,25*13
HPR41092	HPR41093	27	250	280	450/3000	51-M10*1,5*13	40-M8*1,25*13
HPR41094	HPR41095	32	250	280	450/3000	51-M10*1,5*13	40-M8*1,25*13
HPR41096	HPR41097	38	250	280	450/3000	51-M10*1,5*13	40-M8*1,25*13
HPR41098	HPR41099	41	250	280	450/3000	51-M10*1,5*13	40-M8*1,25*13
HPR41100	HPR41101	45	250	280	450/3000	51-M10*1,5*13	40-M8*1,25*13
HPR41102	HPR41103	53	210	235	450/3000	51-M10*1,5*13	40-M8*1,25*13
HPR41104	HPR41105	60	180	200	450/3000	51-M10*1,5*13	40-M8*1,25*13

### SAE A FLANGE 5/8" TEETH SPLINE

PUMPE TYPE PUMP TYPE		FÖRDERVOLL- MEN (cm <sup>3</sup> /U) DISPLACEMENT (cm <sup>3</sup> /rev)	BETRIEBSDRUCK CON. PRESSURE (bar)	SPITZENDRUCK PEAK PRESSURE (bar)	MIN/MAX DEVİR (dev/dk)	SAUGANSCHLESS INLET	DRUCKANSCHLUSS OUTLET
DREHRICH- TUNG LINKS ROTATION AN- TICLOCKWISE	DREHRICH- TUNG LINKS ROTATION CLOCKWISE						
HPR41108	HPR41109	19	250	280	450/3000	51-M10*1,5*13	40-M8*1,25*13
HPR41110	HPR41111	23	250	280	450/3000	51-M10*1,5*13	40-M8*1,25*13
HPR41112	HPR41113	27	250	280	450/3000	51-M10*1,5*13	40-M8*1,25*13
HPR41114	HPR41115	32	250	280	450/3000	51-M10*1,5*13	40-M8*1,25*13
HPR41116	HPR41117	38	250	280	450/3000	51-M10*1,5*13	40-M8*1,25*13
HPR41118	HPR41119	41	250	280	450/3000	51-M10*1,5*13	40-M8*1,25*13
HPR41120	HPR41121	45	250	280	450/3000	51-M10*1,5*13	40-M8*1,25*13
HPR41122	HPR41123	53	210	235	450/3000	51-M10*1,5*13	40-M8*1,25*13
HPR41124	HPR41125	60	180	200	450/3000	51-M10*1,5*13	40-M8*1,25*13

### SAE B FLANGE 7/8" 13 TEETH SPLINE

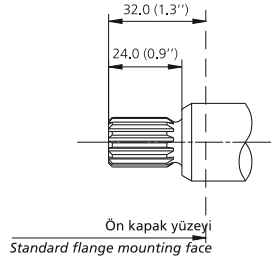
PUMPE TYPE PUMP TYPE		FÖRDERVOLL- MEN (cm <sup>3</sup> /U) DISPLACEMENT (cm <sup>3</sup> /rev)	BETRIEBSDRUCK CON. PRESSURE (bar)	SPITZENDRUCK PEAK PRESSURE (bar)	MIN/MAX DEVİR (dev/dk)	SAUGANSCHLESS INLET	DRUCKANSCHLUSS OUTLET
DREHRICH- TUNG LINKS ROTATION AN- TICLOCKWISE	DREHRICH- TUNG LINKS ROTATION CLOCKWISE						
HPR41128	HPR41129	19	250	280	450/3000	51-M10*1,5*13	40-M8*1,25*13
HPR41130	HPR41131	23	250	280	450/3000	51-M10*1,5*13	40-M8*1,25*13
HPR41132	HPR41133	27	250	280	450/3000	51-M10*1,5*13	40-M8*1,25*13
HPR41134	HPR41135	32	250	280	450/3000	51-M10*1,5*13	40-M8*1,25*13
HPR41136	HPR41137	38	250	280	450/3000	51-M10*1,5*13	40-M8*1,25*13
HPR41138	HPR41139	41	250	280	450/3000	51-M10*1,5*13	40-M8*1,25*13
HPR41140	HPR41141	45	250	280	450/3000	51-M10*1,5*13	40-M8*1,25*13
HPR41142	HPR41143	53	210	235	450/3000	51-M10*1,5*13	40-M8*1,25*13
HPR41144	HPR41145	60	180	200	450/3000	51-M10*1,5*13	40-M8*1,25*13



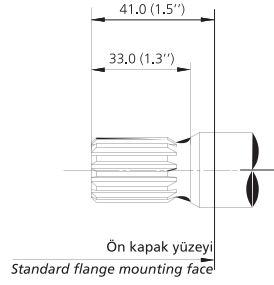


## SHAFT TYPES

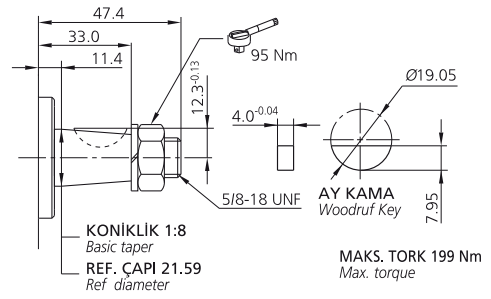
SAE 16-9(A) 5/8" TEETH SPLINE



SAE 22-4(A) 7/8" 13 TEETH SPLINE

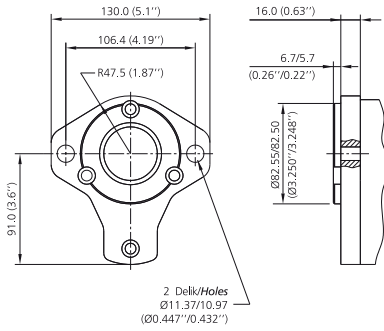


TAPPERED KEY SHAFT 1:8

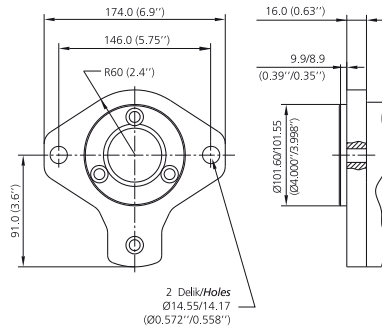


## FLANGE TYPES

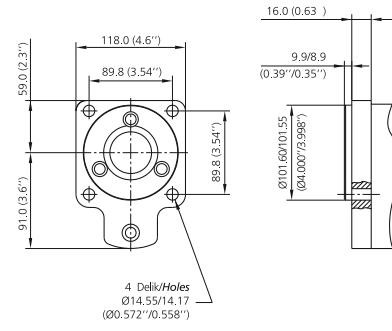
SEA 82-2 (A-2 bolt)



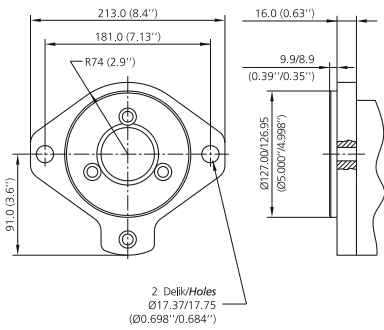
SEA 101-2 (B-2 bolt)



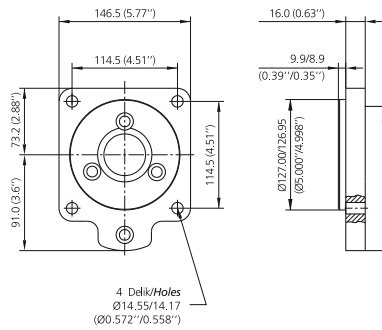
SEA 101-4 (B-4 bolt)



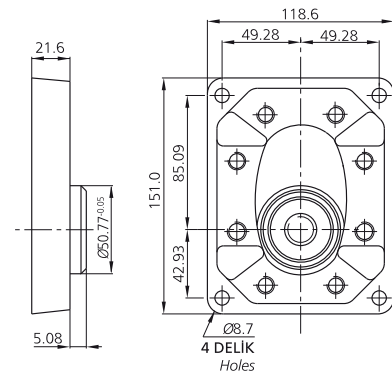
SEA 127-2 (C-2 bolt)



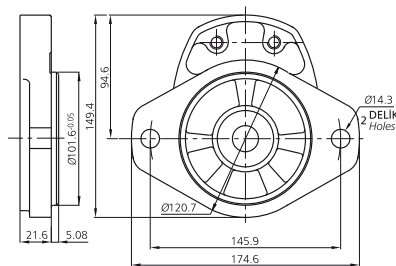
SEA 127-4 (C-4 bolt)



B TYPE RECTANGLE FLANGE



GTYPE FLANGE



**GUSSEISEN  
ZAHNRADPUMPE  
CAST IRON  
GEAR PUMPS**

**GUSSEISEN  
ZAHNRADPUMPE  
CAST IRON  
GEAR PUMPS**



## GUSSEISEN ZAHNRADPUMPE - CAST IRON GEAR PUMPS

### 1600 SERIES

PUMPE MODELL PUMP TYPE	FÖRDERVOLUMEN DISPLACEMENT (cm <sup>3</sup> /U - cm <sup>3</sup> /rev)	BETRIEBSDRUCK CON. PRESSURE	SPITZENDRUCK PEAK PRESSURE	MIN/ MAX. DREHZAHL (min <sup>-1</sup> ) MIN/ MAX. SPEED (rpm)
1604	12,38	170	180	500/2700
1606	14,6	170	180	500/2700
1608	19,4	170	180	500/2700
1610	24,3	170	180	500/2700
1613	31,6	155	165	500/2700
1617	41,3	155	165	500/2700

### 1900 SERIES

PUMPE MODELL PUMP TYPE	FÖRDERVOLUMEN DISPLACEMENT (cm <sup>3</sup> /U - cm <sup>3</sup> /rev)	BETRIEBSDRUCK CON. PRESSURE	SPITZENDRUCK PEAK PRESSURE	MIN/ MAX. DREHZAHL (min <sup>-1</sup> ) MIN/ MAX. SPEED (rpm)
1905	22	210	250	600/2700
1906	29,5	210	250	600/2700
1907	33,43	210	250	600/2700
1909	41,5	210	250	600/2700
1911	51,8	210	250	600/2700
1913	62,1	210	250	600/2700
1916	74,2	170	210	600/2700

### 2200 SERIES

PUMPE MODELL PUMP TYPE	FÖRDERVOLUMEN DISPLACEMENT (cm <sup>3</sup> /U - cm <sup>3</sup> /rev)	BETRIEBSDRUCK CON. PRESSURE	SPITZENDRUCK PEAK PRESSURE	MIN/ MAX. DREHZAHL (min <sup>-1</sup> ) MIN/ MAX. SPEED (rpm)
2207	53,6	210	250	600/2700
2208	58,7	210	250	600/2700
2210	70,1	210	250	600/2700
2213	85,7	210	250	600/2700
2215	101,1	170	210	600/2700
2216	110,8	170	210	600/2700

### QR4 SERIES

PUMPE MODELL PUMP TYPE	FÖRDERVOLUMEN DISPLACEMENT (cm <sup>3</sup> /U - cm <sup>3</sup> /rev)	BETRIEBSDRUCK CON. PRESSURE	SPITZENDRUCK PEAK PRESSURE	MIN/ MAX. DREHZAHL (min <sup>-1</sup> ) MIN/ MAX. SPEED (rpm)
4016	16	250	280	450/3000
4019	19	250	280	450/3000
4023	23	250	280	450/3000
4027	27	250	280	450/3000
4032	32	250	280	450/3000
4038	38	250	280	450/3000
4045	45	250	280	450/3000
4053	53	210	235	450/3000
4060	60	180	200	450/3000







## GUSSEISEN ZAHNRADPUMPE - CAST IRON GEAR PUMPS

### QR5 SERIES

PUMPE MODELL PUMP TYPE	FÖRDERVOLUMEN DISPLACEMENT (cm <sup>3</sup> /U - cm <sup>3</sup> /rev)	BETRIEBSDRUCK CON. PRESSURE	SPITZENDRUCK PEAK PRESSURE	MIN/ MAX. DREHZAHL (min <sup>-1</sup> ) MIN/ MAX. SPEED (rpm)
5045	45	250	280	450/3000
5053	53	250	280	450/3000
5063	63	250	280	450/3000
5073	73	250	280	450/3000
5085	85	250	280	450/3000
5100	100	210	235	450/3000
5120	120	180	200	450/3000

### QR6 SERIES

PUMPE MODELL PUMP TYPE	FÖRDERVOLUMEN DISPLACEMENT (cm <sup>3</sup> /U - cm <sup>3</sup> /rev)	BETRIEBSDRUCK CON. PRESSURE	SPITZENDRUCK PEAK PRESSURE	MIN/ MAX. DREHZAHL (min <sup>-1</sup> ) MIN/ MAX. SPEED (rpm)
6100	100	250	280	450/2750
6117	117	250	280	450/2750
6137	137	250	280	450/2750
6160	160	250	280	450/2750
6187	187	210	235	450/2750
6220	220	180	200	450/2750

### QS4 SERIES

PUMPE MODELL PUMP TYPE	FÖRDERVOLUMEN DISPLACEMENT (cm <sup>3</sup> /U - cm <sup>3</sup> /rev)	BETRIEBSDRUCK CON. PRESSURE	SPITZENDRUCK PEAK PRESSURE	MIN/ MAX. DREHZAHL (min <sup>-1</sup> ) MIN/ MAX. SPEED (rpm)
4016	16	250	280	450/3000
4023	22,2	250	280	450/3000
4027	26,1	250	280	450/3000
4032	30,9	250	280	450/3000
4037	35,8	250	280	450/3000
4042	40,6	210	235	450/3000

### QS5 SERIES

PUMPE MODELL PUMP TYPE	FÖRDERVOLUMEN DISPLACEMENT (cm <sup>3</sup> /U - cm <sup>3</sup> /rev)	BETRIEBSDRUCK CON. PRESSURE	SPITZENDRUCK PEAK PRESSURE	MIN/ MAX. DREHZAHL (min <sup>-1</sup> ) MIN/ MAX. SPEED (rpm)
5045	43,5	250	280	450/3000
5051	49,3	250	280	450/3000
5060	58	250	280	450/3000
5070	67,7	250	280	450/3000
5085	82,2	210	235	450/3000



## GUSSEISEN ZAHNRADPUMPE - CAST IRON GEAR PUMPS

### QS6 SERIES

PUMPE MODELL PUMP TYPE	FÖRDERVOLUMEN DISPLACEMENT (cm <sup>3</sup> /U - cm <sup>3</sup> /rev)	BETRIEBSDRUCK CON. PRESSURE	SPITZENDRUCK PEAK PRESSURE	MIN/ MAX. DREHZAHL (min <sup>-1</sup> ) MIN/ MAX. SPEED (rpm)
6083	80,3	250	280	450/2750
6097	93,8	250	280	450/2750
6113	109,3	250	280	450/2750
6132	127,6	250	280	450/2750
6155	149,9	210	235	450/2750

### QS7 SERIES

PUMPE MODELL PUMP TYPE	FÖRDERVOLUMEN DISPLACEMENT (cm <sup>3</sup> /U - cm <sup>3</sup> /rev)	BETRIEBSDRUCK CON. PRESSURE	SPITZENDRUCK PEAK PRESSURE	MIN/ MAX. DREHZAHL (min <sup>-1</sup> ) MIN/ MAX. SPEED (rpm)
7155	149,9	250	280	450/2400
7180	174,1	250	280	450/2400
7208	201,1	250	280	450/2400
7248	239,8	250	280	450/2400

### QX5 SERIES

PUMPE MODELL PUMP TYPE	FÖRDERVOLUMEN DISPLACEMENT (cm <sup>3</sup> /U - cm <sup>3</sup> /rev)	BETRIEBSDRUCK CON. PRESSURE	SPITZENDRUCK PEAK PRESSURE	MIN/ MAX. DREHZAHL (min <sup>-1</sup> ) MIN/ MAX. SPEED (rpm)
5023	23	250	280	450/3000
5026	26	250	280	450/3000
5027	27	250	280	450/3000
5029	29	250	280	450/3000
5033	33	250	280	450/3000
5036	36	250	280	450/3000
5037	37	250	280	450/3000
5041	41	250	280	450/3000
5046	46	250	280	450/3000
5051	51	250	280	450/3000
5056	56	230	255	450/3000
5063	63	210	235	450/3000
5068	68	190	215	450/3000





## ANTRIEBSWELLEN - DRIVE SHAFT

CODE	ANTRIEBSWELLEN - DRIVE SHAFT	1600	1900	2200
A	5/8" SAE 'A' Zahnwelle - Spline	X	X	X
E	5/8" SAE 'A' Zylindrisch - Parallel	X	X	X
B	7/8" SAE 'B' Zahnwelle - Spline	X	X	X
F	7/8" SAE 'B' Zylindrisch - Parallel	X	X	X
Q	1" SAE 'BB' Zahnwelle - Spline		X	X
H	1" SAE 'BB' Zylindrisch - Parallel		X	X
C	1 1/4" SAE 'C' Zahnwelle - Spline			X
G	1 1/4" SAE 'C' Zylindrisch - Parallel			X
R	1 1/8" SAE Zylindrisch - Parallel		X	X

## FRONTDECKEL - MOUNTING FLANGE

CODE	FRONTDECKEL - MOUNTING FLANGE	1600	1900	2200
1	SAE 'A' 2-LOCHBEFESTIGUNG - 2 HOLE	X	X	
2	SAE 'B' 2-LOCHBEFESTIGUNG - 2 HOLE		X	X
3	SAE 'B' 4-LOCHBEFESTIGUNG - 4 HOLE		X	X
4	SAE 'C' 2-LOCHBEFESTIGUNG - 2 HOLE		X	X
5	SAE 'C' 4-LOCHBEFESTIGUNG - 4 HOLE		X	X
7	SAE 'D' 4-LOCHBEFESTIGUNG - 4 HOLE			
8	6-LOCHBEFESTIGUNG - 6 HOLE ROUND FLANGE	X		

## ANTRIEBSWELLEN - DRIVE SHAFT

CODE	ANTRIEBSWELLEN - DRIVE SHAFT	QR4	QS4	QR5	QS5	QR6	QS6	QS7
A	5/8" SAE 'A' Zahnwelle - Spline	X	X					
E	5/8" SAE 'A' Zahnwelle - Spline	X	X					
B	7/8" SAE 'B' Zahnwelle - Spline	X	X	X	X			
F	7/8" SAE 'B' Zylindrisch - Parallel	X	X					
Q	1" SAE 'BB' Zahnwelle - Spline	X	X	X	X			
H	1" SAE 'BB' Zylindrisch - Parallel	X	X	X	X			
C	1 1/4" SAE 'C' Zahnwelle - Spline			X	X	X	X	X
G	1 1/4" SAE 'C' Zylindrisch - Parallel			X	X	X	X	X
T	1 1/2" SAE 'CC' Zahnwelle - Spline					X	X	X
N	1 1/2" SAE 'CC' Zylindrisch - Parallel					X	X	X
D	1 3/4" SAE 'D' Zahnwelle - Spline							X
P	1 3/4" SAE 'D' Zylindrisch - Parallel							X

## FRONTDECKEL - MOUNTING FLANGE

CODE	FRONTDECKEL - MOUNTING FLANGE	QR4	QS4	QR5	QS5	QR6	QS6	QS7
1	SAE 'A' 2-LOCHBEFESTIGUNG - 2 HOLE	X	X					
2	SAE 'B' 2-LOCHBEFESTIGUNG - 2 HOLE	X	X	X	X			
3	SAE 'B' 4-LOCHBEFESTIGUNG - 4 HOLE	X	X	X	X			
4	SAE 'C' 2-LOCHBEFESTIGUNG - 2 HOLE	X	X	X	X	X	X	
5	SAE 'C' 4-LOCHBEFESTIGUNG - 4 HOLE	X	X	X	X	X	X	X
7	SAE 'D' 4-LOCHBEFESTIGUNG - 4 HOLE							X
39	SAE 'E' 4 LOCHBEFESTIGUNG - 4 HOLE							X

## ANTRIEBSWELLEN - DRIVE SHAFT

CODE	ANTRIEBSWELLEN - DRIVE SHAFT	QX5
A	5/8" SAE 'A' Zahnwelle - Spline	
E	5/8" SAE 'A' Zahnwelle - Spline	
B	7/8" SAE'B' Zahnwelle - Spline	X
F	7/8" SAE'B' Zylindrisch - Parallel	X
Q	1" SAE 'BB' Zahnwelle - Spline	X
H	1" SAE 'BB' Zylindrisch - Parallel	X
C	1 1/4" SAE 'C' Zahnwelle - Spline	X
G	1 1/4" SAE 'C' Zylindrisch - Parallel	X
T	1 1/2" SAE 'CC' Zahnwelle - Spline	
N	1 1/2" SAE 'CC' Zylindrisch - Parallel	

## FRONTDECKEL - MOUNTING FLANGE

CODE	FRONTDECKEL - MOUNTING FLANGE	QX5
1	SAE 'A' 2-LOCHBEFESTIGUNG - 2 HOLE	
2	SAE 'B' 2-LOCHBEFESTIGUNG - 2 HOLE	X
3	SAE 'B' 4-LOCHBEFESTIGUNG - 4 HOLE	X
4	SAE 'C' 2-LOCHBEFESTIGUNG - 2 HOLE	X
5	SAE 'C' 4-LOCHBEFESTIGUNG - 4 HOLE	X
7	SAE 'D' 4-LOCHBEFESTIGUNG - 4 HOLE	





## LEITUNGSANSCHLUSSE - LINE PORTS

### 1600 - 1900 -2200 MODELL PUMPE - 1600-1900-2200 MODEL PUMPS

CODE	SAUGANSCHLUSS - INLET PORT				DRUCKANSCHLUSS - OUTLET PORT			
	SAE S/F METRIC	SAE S/F UNC	BSPP	SAE UNF O RING	SAE S/F METRIC	SAE S/F UNC	BSPP	SAE UNF O RING
1604 - 1617	KEINE - NONE	KEINE - NONE	1"	1" 5/16	KEINE - NONE	KEINE - NONE	1"	1" 5/16
1905 - 1909	1"	1"	KEINE - NONE	KEINE - NONE	3/4"	3/4"	KEINE - NONE	KEINE - NONE
1911 - 1916	1" 1/4	1" 1/4	KEINE - NONE	KEINE - NONE	1"	1"	KEINE - NONE	KEINE - NONE
2207 - 2213	1" 1/2	1" 1/2	KEINE - NONE	KEINE - NONE	1" 1/4	1" 1/4	KEINE - NONE	KEINE - NONE
2215 - 2216	2"	2"	KEINE - NONE	KEINE - NONE	1" 1/4	1" 1/4	KEINE - NONE	KEINE - NONE

### QR MODELL PUMPE - QR TYPE MODEL PUMPS

CODE	SAUGANSCHLUSS - INLET PORT				DRUCKANSCHLUSS - OUTLET PORT			
	SAE S/F METRIC	OPTION 1 SAE S/F UNC	OPTION 2 BSPP	OPTION 3 SAE UNF O RING	SAE S/F METRIC	OPTION 1 SAE S/F UNC	OPTION 2 BSPP	OPTION 3 SAE UNF O RING
QR4016	1"	1"	1"	1" 5/16	1/2"	1/2"	1/2"	7/8"
QR4019	1"	1"	1"	1" 5/16	1/2"	1/2"	1/2"	7/8"
QR4023	1"	1"	1"	1" 5/16	1/2"	1/2"	1/2"	7/8"
QR4027	1" 1/4	1" 1/4	1" 1/4	1" 5/8	3/4"	3/4"	3/4"	1" 1/16
QR4032	1" 1/4	1" 1/4	1" 1/4	1" 5/8	3/4"	3/4"	3/4"	1" 1/16
QR4038	1" 1/4	1" 1/4	1" 1/4	1" 5/8	3/4"	3/4"	3/4"	1" 1/16
QR4045	1" 1/2	1" 1/2	KEINE - NONE	KEINE - NONE	1"	1"	1"	1" 1/16
QR4053	1" 1/2	1" 1/2	KEINE - NONE	KEINE - NONE	1"	1"	1"	1" 1/16
QR4060	1" 1/2	1" 1/2	KEINE - NONE	KEINE - NONE	1"	1"	1"	1" 1/16
QR5045	1" 1/2	1" 1/2	KEINE - NONE	KEINE - NONE	1"	1"	1"	1" 5/16
QR5053	1" 1/2	1" 1/2	KEINE - NONE	KEINE - NONE	1"	1"	1"	1" 5/16
QR5063	1" 1/2	1" 1/2	KEINE - NONE	KEINE - NONE	1"	1"	1"	1" 5/16
QR5073	2"	2"	KEINE - NONE	KEINE - NONE	1" 1/4	1" 1/4	1"	1" 5/16
QR5085	2"	2"	KEINE - NONE	KEINE - NONE	1" 1/4	1" 1/4	1"	1" 5/16
QR5100	2"	2"	KEINE - NONE	KEINE - NONE	1" 1/4	1" 1/4	1"	1" 5/16
QR5120	2"	2"	KEINE - NONE	KEINE - NONE	1" 1/4	1" 1/4	1"	1" 5/16
QR6100	2" 1/2	2" 1/2	KEINE - NONE	KEINE - NONE	1" 1/2	1" 1/2	KEINE - NONE	KEINE - NONE
QR6117	2" 1/2	2" 1/2	KEINE - NONE	KEINE - NONE	1" 1/2	1" 1/2	KEINE - NONE	KEINE - NONE
QR6160	2" 1/2	2" 1/2	KEINE - NONE	KEINE - NONE	1" 1/2	1" 1/2	KEINE - NONE	KEINE - NONE
QR6187	2" 1/2	2" 1/2	KEINE - NONE	KEINE - NONE	1" 1/2	1" 1/2	KEINE - NONE	KEINE - NONE
QR6220	2" 1/2	2" 1/2	KEINE - NONE	KEINE - NONE	1" 1/2	1" 1/2	KEINE - NONE	KEINE - NONE

## LEITUNGSANSCHLUSSE - LINE PORTS

### QS MODELL PUMPE - QS TYPE MODEL PUMPS

PUMP CODE	SAUGANSCHLUSS - INLET PORT				DRUCKANSCHLUSS - OUTLET PORT			
	SAE S/F METRIC	OPTION 1 SAE S/F UNC	OPTION 2 BSPP	OPTION 3 SAE UNF O RING	SAE S/F METRIC	OPTION 1 SAE S/F UNC	OPTION 2 BSPP	OPTION 3 SAE UNF O RING
QS4016	1"	1"	1"	1" 5/16	1/2"	1/2"	1/2"	7/8"
QS4023	1"	1"	1"	1" 5/16	1/2"	1/2"	1/2"	7/8"
QS4027	1" 1/4	1" 1/4	1" 1/4	1" 5/16	3/4"	3/4"	3/4"	1" 1/16
QS4032	1" 1/4	1" 1/4	1" 1/4	1" 5/8	3/4"	3/4"	3/4"	1" 1/16
QS4037	1" 1/4	1" 1/4	1" 1/4	1" 5/8	3/4"	3/4"	3/4"	1" 1/16
QS4042	1" 1/2	1" 1/2	KEINE - NONE	KEINE - NONE	1"	1"	3/4"	1" 1/16
QS5045	1" 1/2	1" 1/2	KEINE - NONE	KEINE - NONE	1"	1"	1"	1" 5/16
QS5051	1" 1/2	1" 1/2	KEINE - NONE	KEINE - NONE	1"	1"	1"	1" 5/16
QS5060	1" 1/2	1" 1/2	KEINE - NONE	KEINE - NONE	1"	1"	1"	1" 5/16
QS5070	2"	2"	KEINE - NONE	KEINE - NONE	1" 1/4	1" 1/4	1"	1" 5/16
QS5085	2"	2"	KEINE - NONE	KEINE - NONE	1" 1/4	1" 1/4	1"	1" 5/16
QS6083	2" 1/2	2" 1/2	KEINE - NONE	KEINE - NONE	1" 1/2	1" 1/2	KEINE - NONE	KEINE - NONE
QS6097	2" 1/2	2" 1/2	KEINE - NONE	KEINE - NONE	1" 1/2	1" 1/2	KEINE - NONE	KEINE - NONE
QS6113	2" 1/2	2" 1/2	KEINE - NONE	KEINE - NONE	1" 1/2	1" 1/2	KEINE - NONE	KEINE - NONE
QS6132	2" 1/2	2" 1/2	KEINE - NONE	KEINE - NONE	1" 1/2	1" 1/2	KEINE - NONE	KEINE - NONE
QS6155	2" 1/2	2" 1/2	KEINE - NONE	KEINE - NONE	1" 1/2	1" 1/2	KEINE - NONE	KEINE - NONE
QS7155	2" 1/2	2" 1/2	KEINE - NONE	KEINE - NONE	1" 1/2	1" 1/2	KEINE - NONE	KEINE - NONE
QS7180	2" 1/2	2" 1/2	KEINE - NONE	KEINE - NONE	1" 1/2	1" 1/2	KEINE - NONE	KEINE - NONE
QS7208	3"	3"	KEINE - NONE	KEINE - NONE	2"	2"	KEINE - NONE	KEINE - NONE
QS7248	3"	3"	KEINE - NONE	KEINE - NONE	2"	2"	KEINE - NONE	KEINE - NONE

### QX5 MODELL PUMPE - QX5 TYPE MODEL PUMPS

PUMP CODE	SAUGANSCHLUSS - INLET PORT				DRUCKANSCHLUSS - OUTLET PORT			
	SAE S/F METRIC	OPTION 1 SAE S/F UNC	OPTION 2 BSPP	OPTION 3 SAE UNF O RING	SAE S/F METRIC	OPTION 1 SAE S/F UNC	OPTION 2 BSPP	OPTION 3 SAE UNF O RING
X5023	1"	1"	1"	1" 5/16	3/4"	3/4"	3/4"	7/8"
X5027	1"	1"	1"	1" 5/16	3/4"	3/4"	3/4"	7/8"
X5029	1" 1/4	1" 1/4	1" 1/4	1" 5/16	3/4"	3/4"	3/4"	1" 1/16
X5033	1" 1/2	1" 1/2	1" 1/4	1" 5/16	1"	1"	3/4"	1" 1/16
X5036	2"	2"	1" 1/2	1" 5/8	1" 1/4	1" 1/4	3/4"	1" 1/16
X5037	2"	2"	1" 1/2	1" 5/8	1" 1/4	1" 1/4	3/4"	1" 1/16
X5041	2"	2"	1" 1/2	1" 5/8	1" 1/4	1" 1/4	1"	1" 1/16
X5046	2"	2"	1" 1/2	1" 5/8	1" 1/4	1" 1/4	1"	1" 1/16
X5051	2" 1/2	2" 1/2	1" 1/2	1" 5/8	1" 1/2	1" 1/2	1"	1" 1/16
X5063	2" 1/2	2" 1/2	1" 1/2	1" 5/8	1" 1/2	1" 1/2	1"	1" 1/16
X5068	2" 1/2	2" 1/2	1" 1/2	1" 5/8	1" 1/2	1" 1/2	1"	1" 1/16



**ORBITMOTOREN  
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**ORBITMOTOREN  
ORBIT MOTORS  
(TORQUE MOTORS)**

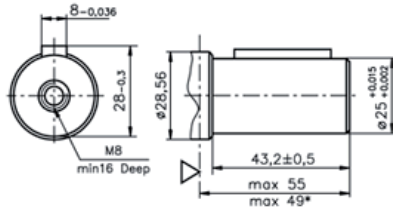




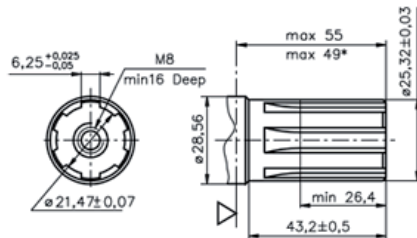
## ORBITMOTOREN - ORBIT MOTORS (TORQUE MOTORS)

### HMR SERIES

Code	Antriebswellen Drive Shaft	Fördervolumen Displacement (cm <sup>3</sup> /U - cm <sup>3</sup> /rev)	Kont. Drehzahl Cont. Speed (U/min-rpm)	Kont. Drehmoment Cont. Torque (daNm)	Kont. Leistung Cont. Output (Kw)	Kont. Förderstrom Cont. Oil Flow (l/min.)	Pitze/Max Eingangsdruck Peak/Max Inlet Pressure (bar)
HMR50A.2	25mm	50	750	9,2	7,00	38	155/138
HMR80A.2	25 mm	80	635	15	9,50	53	155/139
HMR100A.2	25 mm	100	510	19,6	9,50	53	155/138
HMR125A.2	25 mm	125	430	23	8,60	53	155/138
HMR160A.2	25 mm	160	329	27,1	8,60	53	138/124
HMR200A.2	25 mm	200	266	32,8	8,60	53	138/124
HMR250A.2	25 mm	250	213	40,1	8,60	53	138/124
HMR305A.2	25 mm	305	171	41,7	7,00	53	124/103
HMR370A.2	25 mm	370	142	40,2	6,30	53	103/90
HMR395A.2	25 mm	395	133	42,9	6,30	53	103/90



Code	Antriebswellen Drive Shaft	Fördervolumen Displacement (cm <sup>3</sup> /U - cm <sup>3</sup> /rev)	Kont. Drehzahl Cont. Speed (U/min-rpm)	Kont. Drehmoment Cont. Torque (daNm)	Kont. Leistung Cont. Output (Kw)	Kont. Förderstrom Cont. Oil Flow (l/min.)	Pitze/Max Eingangsdruck Peak/Max Inlet Pressure (bar)
HMR50A.6S.2	SAE 6B	50	750	9,2	7,00	38	155/138
HMR80A.6S.2	SAE 6B	80	635	15	9,50	53	155/138
HMR100A.6S.2	SAE 6B	100	510	19,6	9,50	53	155/138
HMR125A.6S.2	SAE 6B	125	430	23	8,60	53	155/138
HMR160A.6S.2	SAE 6B	160	329	27,1	8,60	53	138/124
HMR200A.6S.2	SAE 6B	200	266	32,8	8,60	53	138/124
HMR250A.6S.2	SAE 6B	250	213	40,1	8,60	53	138/124
HMR305A.6S.2	SAE 6B	305	171	41,7	7,00	53	124/103
HMR305A.6S.2	SAE 6B	305	171	41,7	7,00	53	124/103

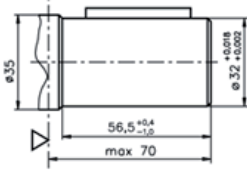
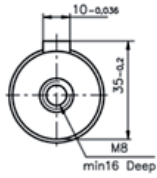




## ORBITMOTOREN - ORBIT MOTORS (TORQUE MOTORS)

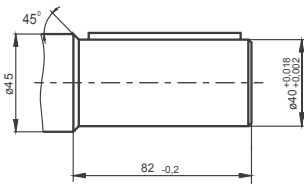
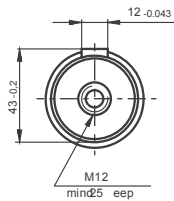
### HMS SERIES

Code	Antriebswellen Drive Shaft	Fördervolumen Displacement (cm <sup>3</sup> /U - cm <sup>3</sup> / rev)	Kont. Drehzahl Cont. Speed (U/min-rpm)	Kont. Drehmoment Cont. Torque (daNm)	Kont. Leistung Cont. Output (Kw)	Kont. Förderstrom Cont. Oil Flow (l/min.)	Pitze/Max Eingangsdruck Peak/Max Inlet Pressure (bar)
HMS80BR.2	32mm	80	908	19,5	16	75	310/170
HMS80BS.2	32mm	80	908	19,5	16	75	310/170
HMS100BR.2	32mm	100	924	24,5	16	95	310/170
HMS100BS.2	32mm	100	924	24,5	16	95	310/170
HMS130BR.2	32mm	125	820	31,5	16	95	310/170
HMS130BS.2	32mm	125	820	31,5	16	95	310/170
HMS160BR.2	32mm	160	713	38,5	16	115	260/170
HMS160BS.2	32mm	160	713	38,5	16	115	260/170
HMS200BR.2	32mm	195	577	46,5	16	115	260/170
HMS200BS.2	32mm	195	577	46,5	16	115	260/170
HMS245BR.2	32mm	245	462	55,5	16	115	260/170
HMS245BS.2	32mm	245	462	55,5	16	115	260/170
HMS305BR.2	32mm	305	365	61	15	115	240/170
HMS305BS.2	32mm	305	365	61	15	115	240/170



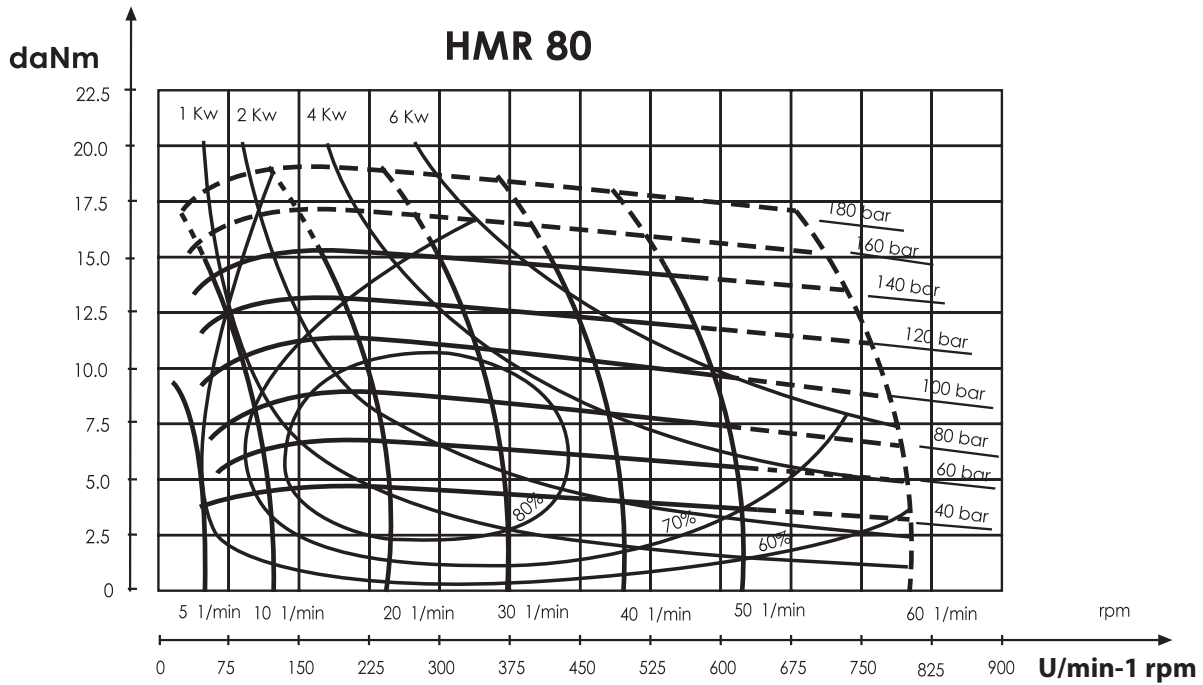
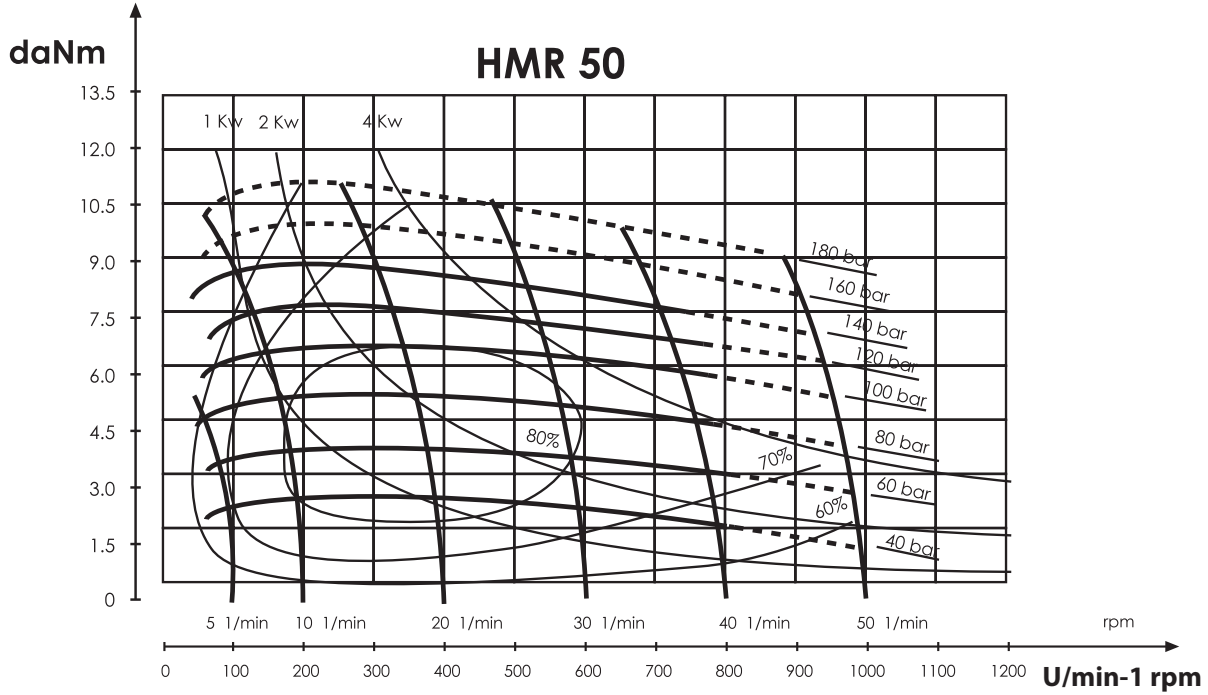
### HMT SERIES

Code	Antriebswellen Drive Shaft	Fördervolumen Displacement (cm <sup>3</sup> /U - cm <sup>3</sup> / rev)	Kont. Drehzahl Cont. Speed (U/min-rpm)	Kont. Drehmoment Cont. Torque (daNm)	Kont. Leistung Cont. Output (Kw)	Kont. Förderstrom Cont. Oil Flow (l/min.)	Pitze/Max Eingangsdruck Peak/Max Inlet Pressure (bar)
HMT195M.2	40mm	195	775	57,5	40	150	310/205
HMT245M.2	40mm	245	615	73	40	150	310/205
HMT310M.2	40mm	310	485	93	40	150	310/205
HMT390M.2	40mm	390	387	115,5	40,7	150	310/205





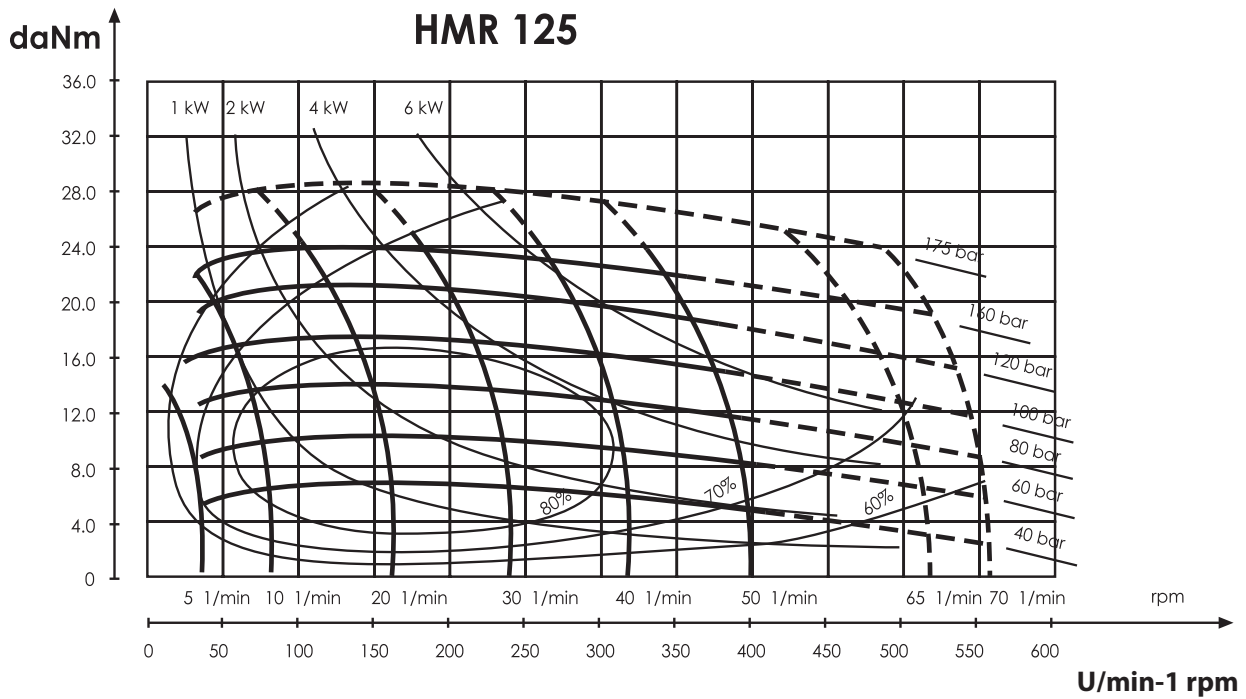
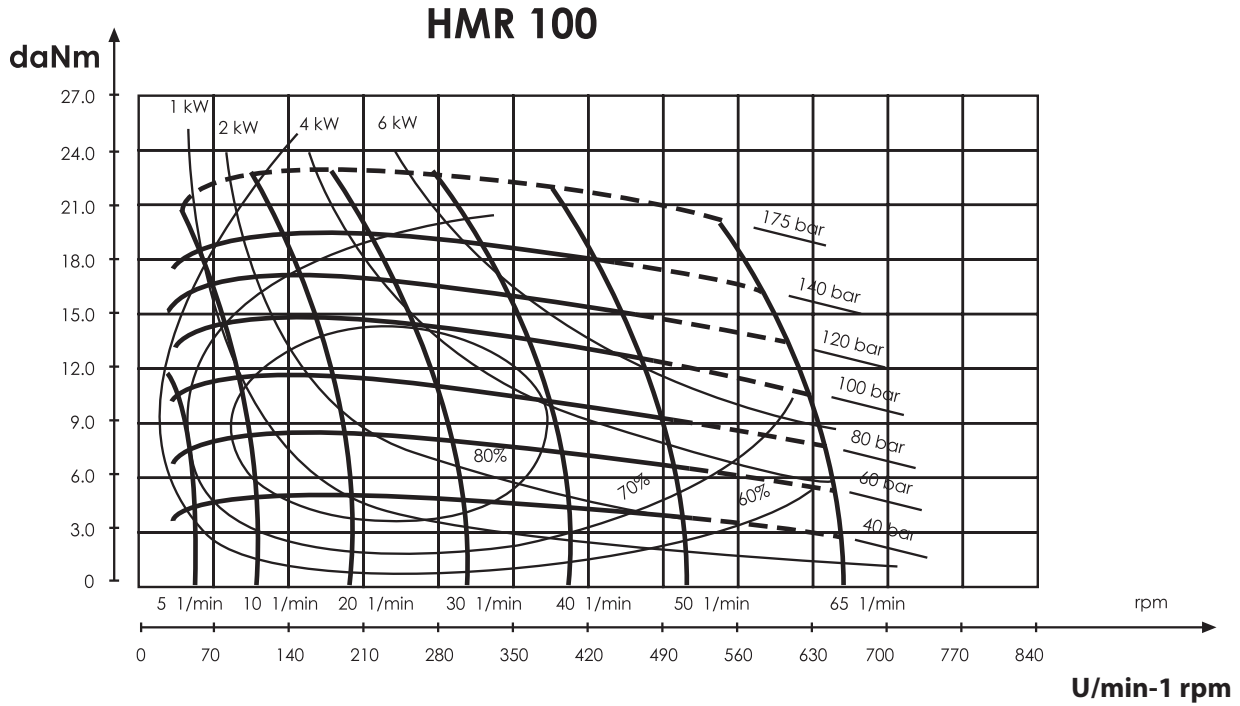
## ORBITMOTOREN - ORBIT MOTORS (TORQUE MOTORS)





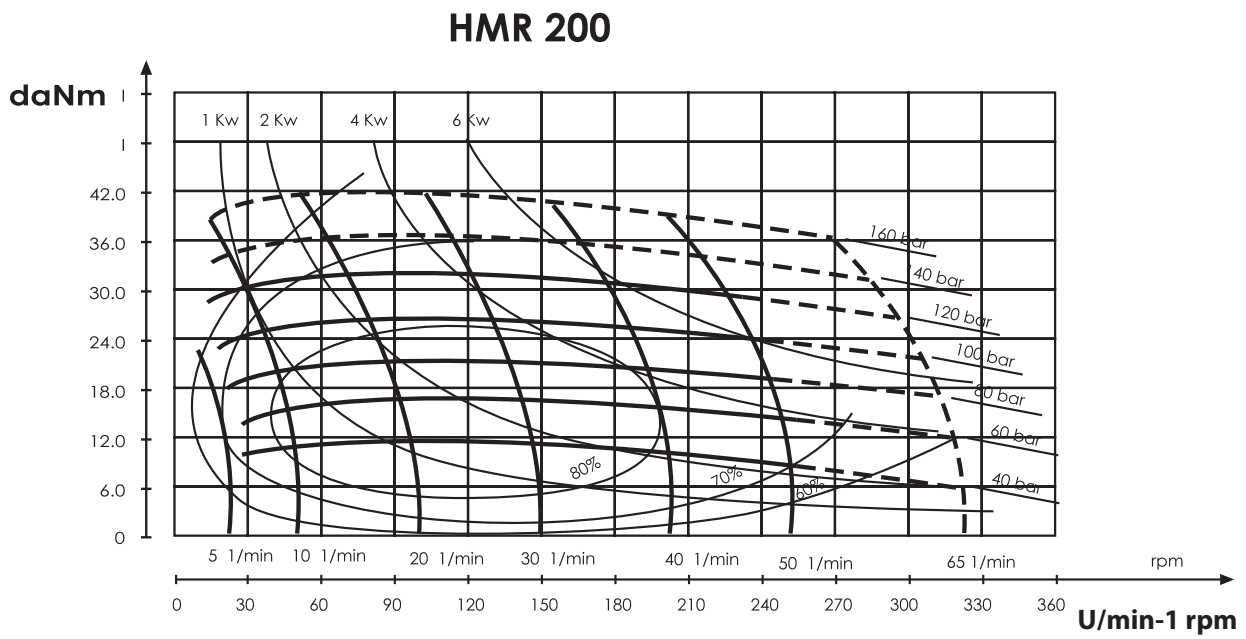
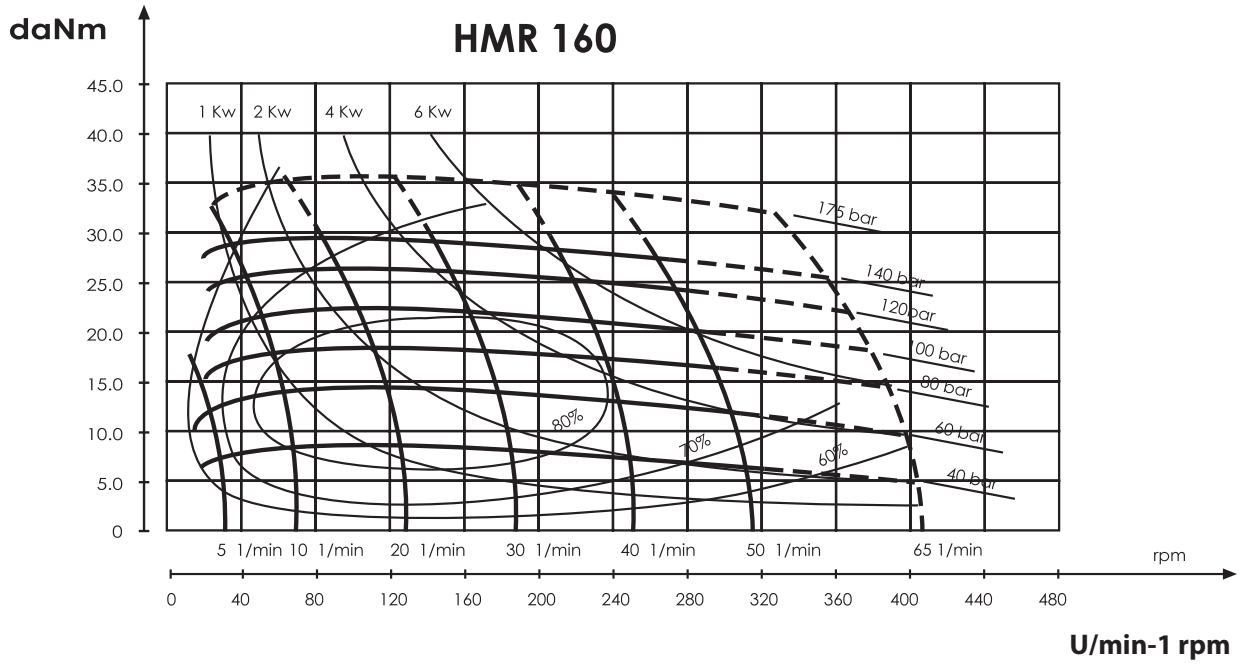


## ORBITMOTOREN - ORBIT MOTORS (TORQUE MOTORS)



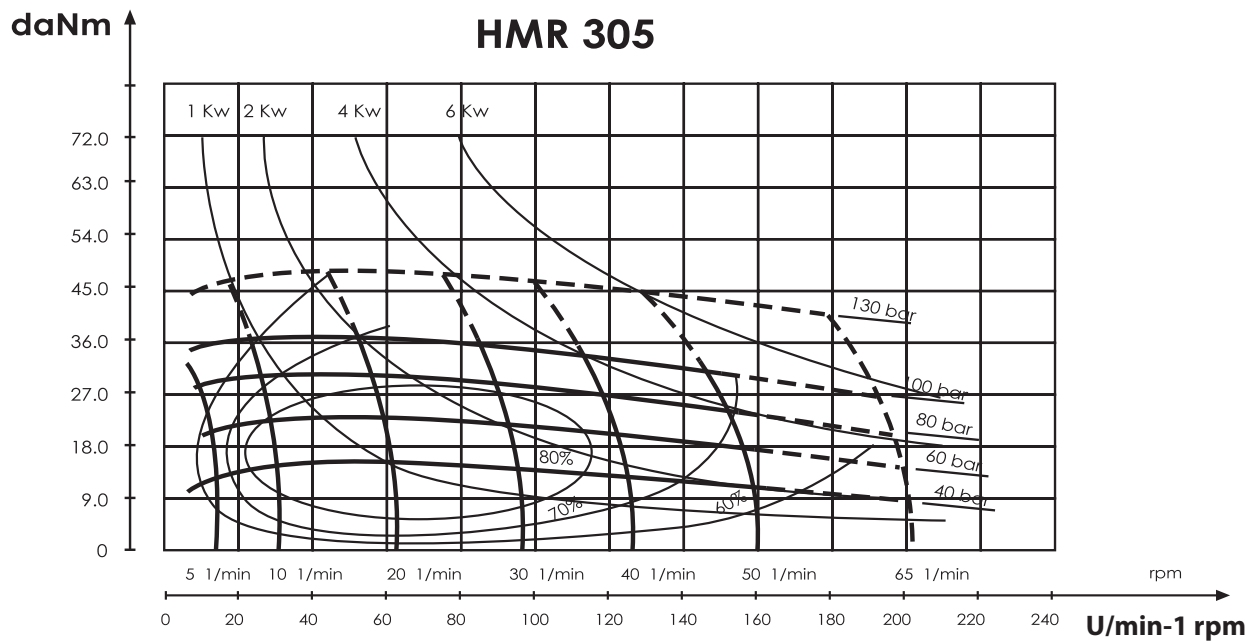
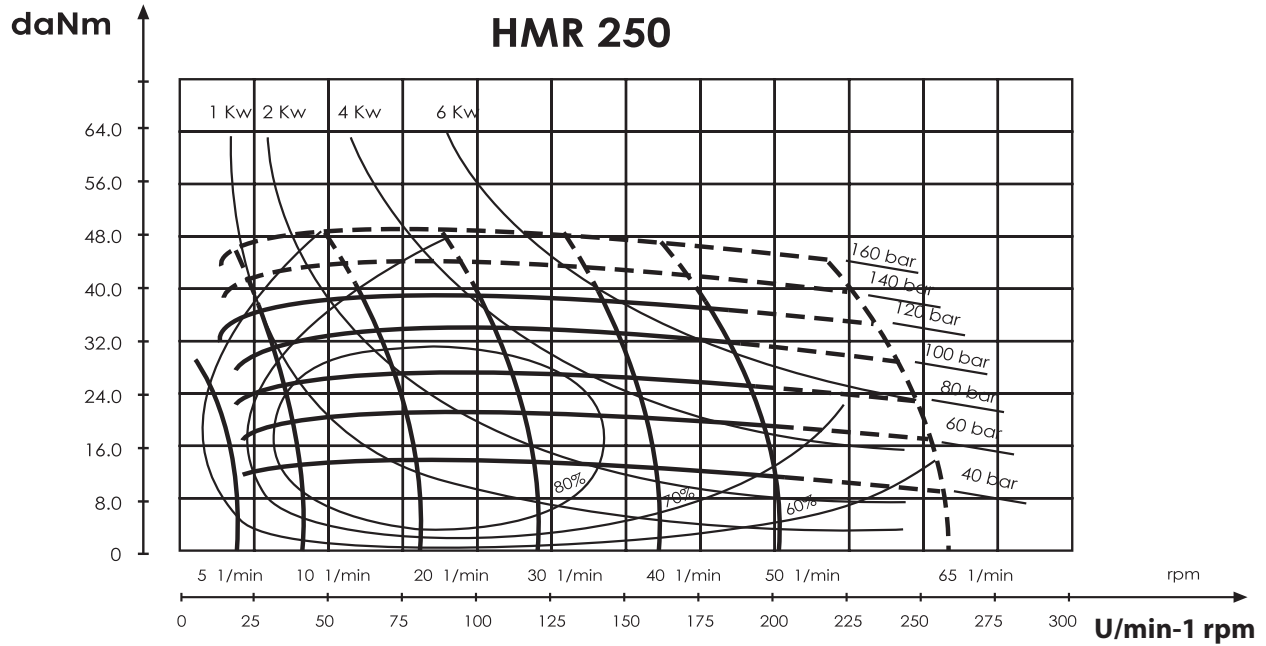


## ORBITMOTOREN - ORBIT MOTORS (TORQUE MOTORS)



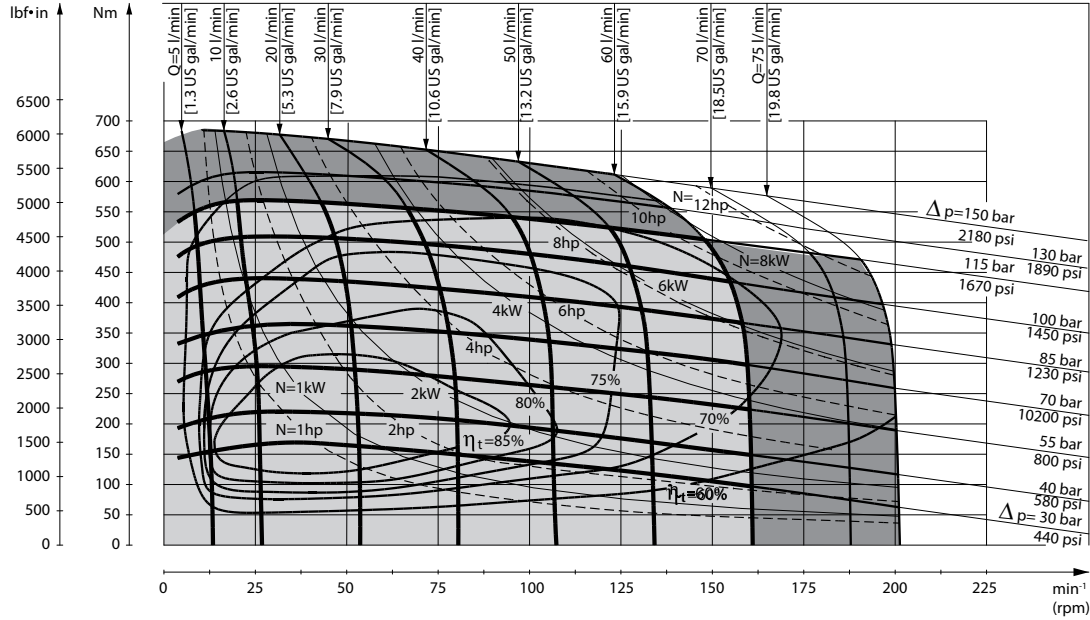


## ORBITMOTOREN - ORBIT MOTORS (TORQUE MOTORS)



**ORBITMOTOREN - ORBIT MOTORS (TORQUE MOTORS)**

**OMR 395**



151-1385.11





**HYDRAULIK  
LENKEINHEITEN  
HYDROSTATIC  
STEERING UNIT**

**HYDRAULIK  
LENKEINHEITEN  
HYDROSTATIC  
STEERING UNIT**



## HYDRAULIK LENKEINHEITEN - HYDROSTATIC STEERING UNIT

### OPEN CENTER



CODE	Fördervolumen Displacement (cm <sup>3</sup> /U - cm <sup>3</sup> / rev)	Länge Length (mm)	Förder- strom Oil Flow (L/ Min.)	Dauerdruck Con. Pressure (Bar)	Begrenzu- ngsventile Druck Relief valve pressure (bar)	Schockventile Druck Shock valve pressure (bar)	Anschluss T Druck T Port Pressure (bar)
HHU050ON.4	50cc/rev	120,7	12	210	90~95	150~170	35
HHU080ON.4	80cc/rev	124,7	12	210	140	200	35
HHU100ON.4	100cc/rev	127,5	12	210	90~95	150~170	35
HHU100ON.4M	100cc/rev	127,5	12	210	140	200	35
HHU120ON.4	120cc/rev	130,1	16	210	140	200	35
HHU160ON.4	160cc/rev	136,2	23	210	140	200	35
HHU200ON.4	200cc/rev	139,8	23	210	140	200	35
HHU250ON.4	260cc/rev	149	23	210	140	200	35
HHU315ON.4	315cc/rev	154,9	32	210	140	200	20

### LOAD SENSING



CODE	Fördervolumen Displacement (cm <sup>3</sup> /U - cm <sup>3</sup> / rev)	Länge Length (mm)	Förder- strom Oil Flow (L/ Min.)	Dauerdruck Con. Pressure (Bar)	Begrenzu- ngsventile Druck Relief valve pressure (bar)	Schockventile Druck Shock valve pressure (bar)	Anschluss T Druck T Port Pressure (bar)
HHU100LS.4	100cc/rev	127,5	23	210	140~145	200	10
HHU120LS.4	120cc/rev	130,1	23	210	175	240	35
HHU160LS.4	160cc/rev	136,2	23	210	175	240	35
HHU200LS.4	200cc/rev	139,8	23	210	90~95	150~170	35
HHU250LS.4	260cc/rev	149	23	210	90~95	150~170	35
HHU315LS.4	315cc/rev	154,9	32	219	175	240	15
HHU400LS.4	400cc/rev	167,7	32	210	175	240	15
HHU500LS.4	500cc/rev	182,7	32	210	175	240	15
HHU630LS.4	630cc/rev	198,8	63	210	170	230	20





**MONOBLOCK  
WEGENVENTILE  
MOBOLOCK  
DIRECTIONAL  
CONTROL VALVES**

**MONOBLOCK  
WEGENVENTILE  
MOBOLOCK DIRECTIONAL  
CONTROL VALVES**



## MONOBLOCK WEGENVENTILE MOBLOCK DIRECTIONAL CONTROL VALVES



CODE	SEKTIONEN - SECTION	BAUGRÖÖE - SIZE	Qmax ( L/m )
MV045110M	1	3/8"	35
MV045110M	1	3/8"-1/2"	50
MV045222M	2	3/8"-1/2"	50
MV045306M	3	3/8"-1/2"	50
MV045401M	4	3/8"-1/2"	50
MV045501M	5	3/8"-1/2"	50
MV045601M	6	3/8"-1/2"	50
MV045701M	7	3/8"-1/2"	50
MV070101M	1	1/2"	70
MV070201M	2	1/2"	70
MV070301M	3	1/2"	70
MV070401M	4	1/2"	70
MV070501M	5	1/2"	70
MV070601M	6	1/2"	70
MV070701M	7	1/2"	70
MV090210M	2	3/4"	90
MV090310M	3	3/4"	90





## SEKTIONAL WEGEVENTILE SECTIONAL DIRECTIONAL CONTROL VALVES



CODE	SEKTIONEN - SECTION	BAUGRÖÖE - SIZE	Qmax ( L/m )
MV080101M	1	1/2"-3/4	80
MV080201M	2	1/2"-3/4	80
MV080301M	3	1/2"-3/4	80
MV080401M	4	1/2"-3/4	80
MV080501M	5	1/2"-3/4	80
MV080601M	6	1/2"-3/4	80
MV080701M	7	1/2"-3/4	80
MV080801M	8	1/2"-3/4	80
MV080901M	9	1/2"-3/4	80
MV100101M	1	3/4"	100
MV100201M	2	3/4"	100
MV100301M	3	3/4"	100
MV100401M	4	3/4"	100
MV100501M	5	3/4"	100
MV100601M	6	3/4"	100
MV100701M	7	3/4"	100
MV100801M	8	3/4"	100
MV100901M	9	3/4"	100
MV120101M	1	3/4"	120
MV120201M	2	3/4"	120
MV120301M	3	3/4"	120
MV120401M	4	3/4"	120
MV120501M	5	3/4"	120
MV120601M	6	3/4"	120
MV120701M	7	3/4"	120
MV120801M	8	3/4"	120
MV120901M	9	3/4"	120
MV150101M	1	3/4" - 1"	150
MV150201M	2	3/4" - 1"	150
MV150301M	3	3/4" - 1"	150
MV150401M	4	3/4" - 1"	150
MV150501M	5	3/4" - 1"	150
MV150601M	6	3/4" - 1"	150
MV150701M	7	3/4" - 1"	150
MV150801M	8	3/4" - 1"	150
MV150901M	9	3/4" - 1"	150

**HYDRAULIK  
KOMPAKTAGGREGATE  
HYDRAULIC  
POWER PACK**

**HYDRAULIK  
KOMPAKTAGGREGATE  
HYDRAULIC  
POWER PACK**



## HYDRAULIK KOMPAKTAGGREGATE HYDRAULIC POWER PACK

### EINZELWIRKUNG ANWENDUNG - SINGLE ACTING APPLICATION



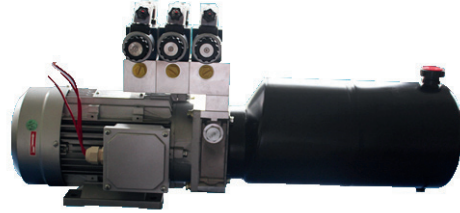
MOTORENLEISTUNG - MOTOR POWER		PUMPEVOLUMEN PUMP FLOW	ÖLBEHÄLTER VOL. OIL TANK VOL.	MONTAGEPOSITION ASSEMBLY POSITION	MAGNET SOLENOID
<b>12 V DC</b>	0,8 KW - 12 V DC/3800 rpm				
	1,6 KW - 12 V DC/2950 rpm				
	2,6 KW - 12 V DC/2300 rpm				
<b>24 V DC</b>	0,8 KW - 24 V DC/2300 rpm				
	2,2 KW - 24 V DC/3100 rpm				
	3,0 KW - 24 V DC/2300 rpm				
<b>220 V AC</b>	4,5 KW - 24 V DC/2700 rpm	0,08 cc			
	0,75 KW - 220 V AC/2800 rpm	1,10 cc	2 L		
	0,75 KW - 220 V AC/1400 rpm	1,60 cc	2,8 L		
	1,5 KW - 220 V AC/2850 rpm	2,10 cc	4 L		
	1,5 KW - 220 V AC/1400 rpm	2,70 cc	5 L	Horizontal Vertical	12 VDC
	2,2 KW - 220 V AC/2850 rpm	3,20 cc	6 L		24 VDC
		3,70 cc	8 L		110 VAC
		4,20 cc	10 L		220 VAC
	4,80 cc	12 L			
	5,80 cc	20 L			
	7,00 cc	30 L			
	8,00 cc				
<b>380 V AC</b>	0,75 KW - 380 V AC/2800 rpm				
	0,75 KW - 380 V AC/1400 rpm				
	1,1 KW - 380 V AC/2800 rpm				
	1,1 KW - 380 V AC/1400 rpm				
	1,5 KW - 380 V AC/2850 rpm				
	1,5 KW - 380 V AC/1400 rpm				
	2,2 KW - 380 V AC/2850 rpm				
	2,2 KW - 380 V AC/1400 rpm				
	3,0 KW - 380 V AC/2850 rpm				



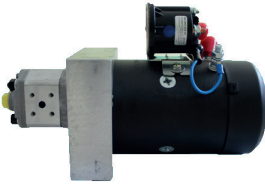


## HYDRAULIK KOMPAKTAGGREGATE HYDRAULIC POWER PACK

DOPPELTWIRKEND ANWENDUNG - DOUBLE ACTING APPLICATION



MOTORENLEISTUNG - MOTOR POWER		PUMPEVOLUMEN PUMP FLOW	ÖLBEHÄLTER VOL. OIL TANK VOL.	MONTAGEPOSITION ASSEMBLY POSITION
12 V DC	0,8 KW - 12 V DC/3800 rpm			
	1,6 KW - 12 V DC/2950 rpm			
	2,6 KW - 12 V DC/2300 rpm			
24 V DC	0,8 KW - 24 V DC/2300 rpm			
	2,2 KW - 24 V DC/3100 rpm			
	3,0 KW - 24 V DC/2300 rpm			
220 V AC	4,5 KW - 24 V DC/2700 rpm	0,08 cc		
	0,75 KW - 220 V AC/2800 rpm	1,10 cc	2 L	
	0,75 KW - 220 V AC/1400 rpm	1,60 cc	2,8 L	
	1,5 KW - 220 V AC/2850 rpm	2,10 cc	4 L	
	1,5 KW - 220 V AC/1400 rpm	2,70 cc	5 L	Horizontal Vertical
	2,2 KW - 220 V AC/2850 rpm	3,20 cc	6 L	
380 V AC	2,2 KW - 220 V AC/2850 rpm	3,70 cc	8 L	
	0,75 KW - 380 V AC/2800 rpm	4,20 cc	10 L	
	0,75 KW - 380 V AC/1400 rpm	4,80 cc	2 L	
	1,1 KW - 380 V AC/2800 rpm	5,80 cc	20 L	
	1,1 KW - 380 V AC/1400 rpm	7,00 cc	30 L	
	1,5 KW - 380 V AC/2850 rpm	8,00 cc		
	1,5 KW - 380 V AC/1400 rpm			
	2,2 KW - 380 V AC/2850 rpm			
2,2 KW - 380 V AC/1400 rpm				
3,0 KW - 380 V AC/2850 rpm				



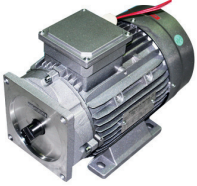
CODE	BESECHREIBUNG - DESCRIPTION
MB10	Adapter Platten - Adapter Plate
MB12	NG6 Ventile Platten - Valve Pate
MB17	HandPUMPE Platten - Hand Pump Plate

CODE	BESECHREIBUNG DESCRIPTION	MOTOR	PUMPE PUMP
ESP24220	Emergency Pump	2.2 KW - 24 V DC	2.0 cc
ESP24300	Emergency Pump	3.0 KW - 24 V DC	4.2 cc

## HYDRAULIK KOMPAKTAGGREGATE HYDRAULIC POWER PACK

### ELEKTROMOTOREN - ELECTRIC MOTORS

CODE	SPANNUNG - VOLTAGE	MOTORENLEISTUNG - MOTOR POWER	U/min - rpm
MS701-4	380V AC	0.37 KW	1450
MS701-2	380V AC	0.37 KW	2800
MS801-4	380V AC	0.75 KW	1400
MS801-2	380V AC	0.75 KW	2800
MS802-4	380V AC	1.1 KW	1400
MS802-2	380V AC	1.1 KW	2800
MS90M1-4	380V AC	1.5 KW	1400
MS90S-2	380V AC	1.5 KW	2850
MS90L2-4	380V AC	2.2 KW	1400
MS90L1-2	380V AC	2.2 KW	2850
MS90L2-2	380V AC	3 KW	2850



CODE	SPANNUNG - VOLTAGE	MOTORENLEISTUNG - MOTOR POWER	U/min - rpm
ML802-4	220V AC	0.75 KW	1450
ML801-2	220V AC	0.75 KW	2800
ML90L1-4	220V AC	1.5 KW	1400
ML90S-2	220V AC	1.5 KW	2850
ML90L2-2	220V AC	2.2 KW	2850



CODE	SPANNUNG - VOLTAGE	MOTORENLEISTUNG - MOTOR POWER	U/min - rpm
MD12080AE	12V DC	0.8 KW	3800
MD12160	12V DC	1.6 KW	2950
MD12260	12V DC	2.6 KW	2300



CODE	SPANNUNG - VOLTAGE	MOTORENLEISTUNG - MOTOR POWER	U/min - rpm
MD24080AE	24V DC	0.8 KW	3800
MD24220	24V DC	2.2 KW	3100
MD24300	24V DC	3 KW	2300
MD24300	24V DC	4.5 KW	2300

### PUMPE - PUMP

CODE	FÖRDERVOLUMEN(cm³/U) DISPLACEMENT (cm³/rev)	DAUERDRUCK CON. PRESSURE(Bar)	MAX. DREHZAL MAX. SPEED
0.5P008ADR6	0,08	250 Bar	3500
0.5P011ADR6	1,10	250 Bar	3500
0.5P016ADR6	1,60	250 Bar	3500
0.5P021ADR6	2,10	250 Bar	3500
0.5P027ADR6	2,70	250 Bar	3500
0.5P032ADR6	3,20	250 Bar	3500
0.5P037ADR6	3,70	220 Bar	3500
0.5P042ADR6	4,20	220 Bar	3500
0.5P048ADR6	4,80	200 Bar	3500
0.5P058ADR6	5,80	200 Bar	3500
0.5P070ADR6	7,00	200 Bar	3500
0.5P080ADR6	8,00	180 Bar	3500





## HYDRAULIK KOMPAKTAGGREGATE HYDRAULIC POWER PACK

### MAIN BLÖCKE - MAIN MANIFOLDS

CODE	BESECHREIBUNG - DESCRIPTION
CMC-01	P-T BLOCK
CMC-05	BLOCK MIT SITZVENTIL UND STROMVENTIL - BLOCK WITH POPED AND THORTTLE VALVE

### STAHL ÖLBEHÄLTER - STEEL TANK

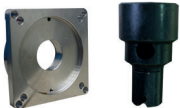


CODE	BESECHREIBUNG - DESCRIPTION	BAUGRÖÖE - SIZE
TS120B152-H/V	Stahl Ölbehälter - Steel Tank - 1.7 LT	Horizontal/Vertical
TS120B215-H/V	Stahl Ölbehälter - Steel Tank - 2.8 LT	Horizontal/Vertical
TS120B270-H/V	Stahl Ölbehälter - Steel Tank - 4 LT	Horizontal/Vertical
TS120C225-H/V	Stahl Ölbehälter - Steel Tank - 4 LT	Horizontal/Vertical
TS120C270-H/V	Stahl Ölbehälter - Steel Tank - 5 LT	Horizontal/Vertical
TS120C290-H/V	Stahl Ölbehälter - Steel Tank - 6 LT	Horizontal/Vertical
TS120C370-H/V	Stahl Ölbehälter - Steel Tank - 8 LT	Horizontal/Vertical
TS120C440-H/V	Stahl Ölbehälter - Steel Tank - 10 LT	Horizontal/Vertical
TS120C545-H/V	Stahl Ölbehälter - Steel Tank - 12 LT	Horizontal/Vertical
TS120F290	Stahl Ölbehälter - Steel Tank - 20 LT	Vertical
TS120F420	Stahl Ölbehälter - Steel Tank - 30 LT	Vertical

### ERSATZTEIL- SPARE PARTS



CODE	BESECHREIBUNG - DESCRIPTION
DCP-035/038/048	KUPLUNG - COUPLING
FC-03/FC-04	BELUFTANGSFILLER - BREATHER CAP - 3/8" 1/2"
FS-03A/FS-03B	SAUGEN FILTER - SUCTION FILTER
FP-02A/FP-03B	SAUGEN ROHR - SUCTION PIPE
RP-02/RP-03	T ROHR - T PIPE
FM82	FUSSFLANSCH - FOOT FLANGE



CODE	BESECHREIBUNG - DESCRIPTION	BAUGRÖÖE - SIZE
FMC70	B14 MOTOR MONTAGEN SET - ASSEMBLY SET	70
FMC80	B14 MOTOR MONTAGEN SET - ASSEMBLY SET	80
FMC90	B14 MOTOR MONTAGEN SET - ASSEMBLY SET	90



CODE	BESECHREIBUNG - DESCRIPTION	SPANNUNG - VOLTAGE	AMPER
DK0312	STARTER	12V DC	200 A
DK0324A	STARTER	24V DC	150 A

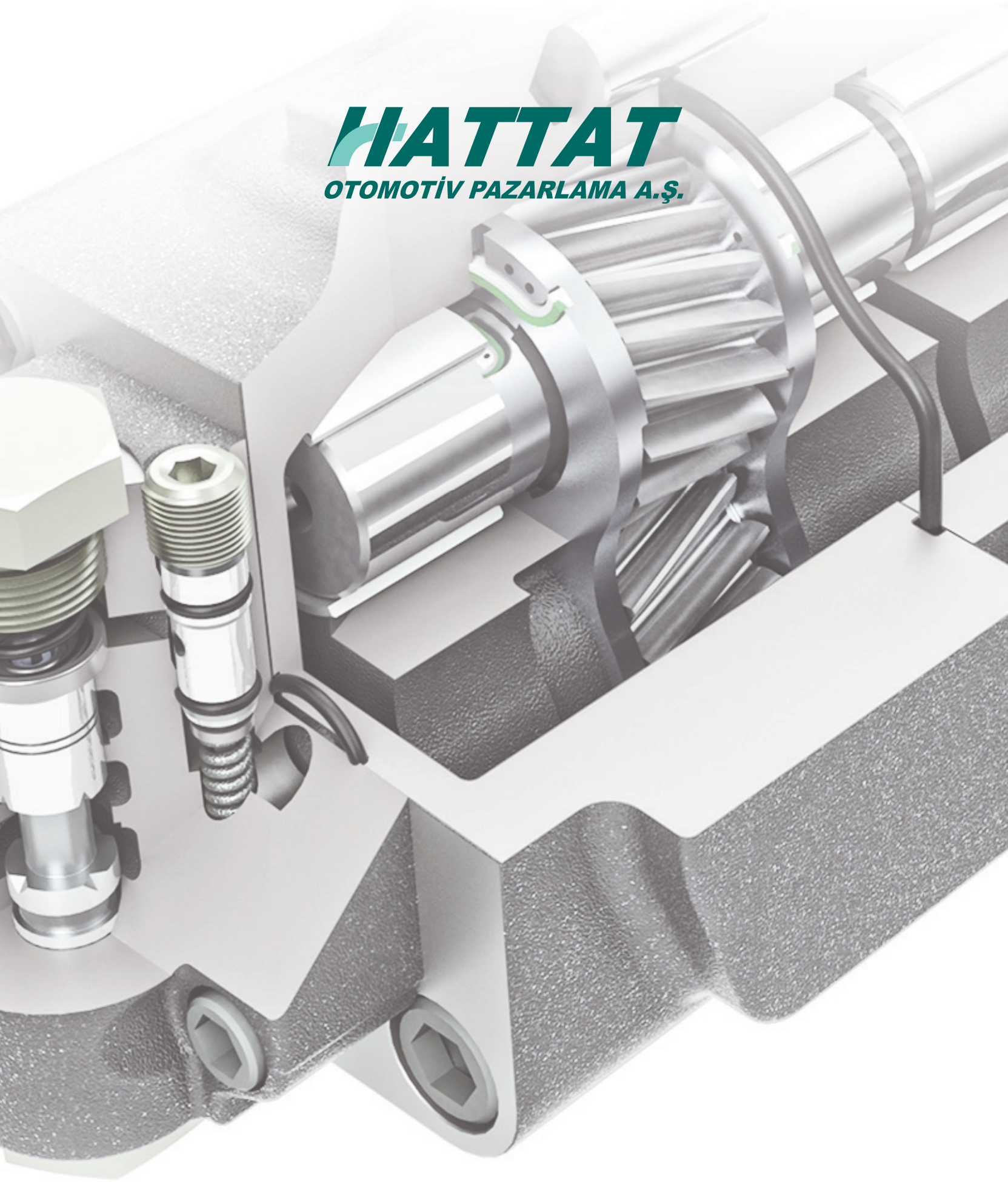


**HATTAT**  
OTOMOTİV PAZARLAMA A.Ş.



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