

# Motoren der MA Serie

## EIGENSCHAFTEN

Motorausführung	Schluckvolumen		Max. zulässige Dauerdrehzahl (1)	Max. zulässige Spitzendrehzahl (1)	Max. Schluckstrom		Max. Drehmoment in Abhängigkeit des Drucks		Drehmoment bei 5100 psi (350 bar)		Theoretisch maximale Leistung bei 5800 psi 400 bar		Max. zulässiger Dauerdruck/Spitzendruck		Gewicht (kg)	
	cu.in/rev	cc/tr	U/min.	U/min.	gpm	l/mn	lbf.ft/psi	Nm/bar	lbf ft	Nm	HP	kW	psi	bar	lbs	Kg
MA 10	0.62	10.2	8000	8800	21.6	82	0.0082	0.16	42	57	72.9	54.4	5800 / 6525	400 / 450	14.3	6.5
MA 12	0.73	12.0	8000	8800	25.4	96	0.0097	0.19	49	67	85.7	64	5800 / 6525	400 / 450	14.3	6.5
MA 18	1.10	18.0	8000	8800	38.0	144	0.0145	0.29	74	100	128.7	96	5800 / 6525	400 / 450	14.3	6.5
MA 25	1.52	24.9	6300	6900	41.4	157	0.0201	0.40	102	139	140.1	104.5	5800 / 6525	400 / 450	25	11.5
MA 32	1.96	32.1	6300	6900	53.4	202	0.0259	0.51	132	179	180.7	134.8	5800 / 6525	400 / 450	25	11.5
MA 41	2.51	41.1	5600	6200	60.8	230	0.0331	0.65	169	229	205.6	153.4	5800 / 6525	400 / 450	25	11.5
MA 45	2.77	45.4	5000	5500	60.0	227	0.0366	0.72	187	253	202.8	151.3	5800 / 6525	400 / 450	40	18
MA 50	3.07	50.3	5000	5500	66.4	252	0.0405	0.80	207	280	224.7	167.6	5800 / 6525	400 / 450	40	18
MA 63	3.84	63.0	5000	5500	83.2	315	0.0508	1.00	259	351	281.5	210	5800 / 6525	400 / 450	40	18
MA 80	4.91	80.4	4500	5000	95.6	362	0.0648	1.28	330	448	323.3	241.2	5800 / 6525	400 / 450	51	23
MA 90	5.49	90.0	4500	5000	107.0	405	0.0725	1.43	370	501	361.9	270	5800 / 6525	400 / 450	51	23
MA 108R	6.61	108.3	3400	4500	97.3	368	0.0872	1.72	445	603	329	245.4	5800 / 6525	400 / 450	77	35
MA 125	7.65	125.4	3400	4500	112.6	426	0.1010	2.00	515	699	381	284.2	5800 / 6525	400 / 450	77	35
MA 160	9.76	160.0	3600	4000	152.2	576	0.1289	2.55	657	891	514.7	384	5800 / 6525	400 / 450	107	48.5
MA 180	11.02	180.6	3600	4000	171.8	650	0.1455	2.87	742	1006	581	433.4	5800 / 6525	400 / 450	107	48.5

(1) Für höhere Drehzahlen nehmen Sie bitte Kontakt mit uns auf.

### ► Max. zulässige Kräfte

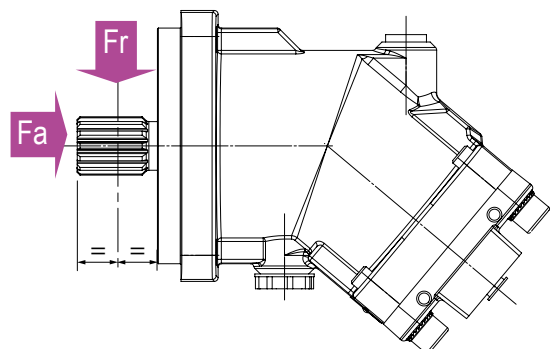
Motorausführung		10	12	18	25	32	41	45	50	63	80	90	108 R	125	160	180
Fr	lbf	528	630	900	1350	1462.5	1574	1462.5	1686	2023	2360	2473	2812	3262	4050	4500
	N	2350	2800	4000	6000	6500	7000	6500	7500	9000	10500	11000	12500	14500	18000	20000
Fa	lbf/psi	0.19	0.23	0.31	0.42	0.46	0.62	0.62	0.62	0.77	0.93	1.03	1.24	1.33	1.32	1.47
	N/psi (N/bar)*	0.83 (12)	1.03 (15)	1.37 (20)	1.86 (27)	2.06 (30)	2.75 (40)	2.75 (40)	2.75 (40)	3.44 (50)	4.14 (60)	4.62 (67)	5.52 (80)	5.93 (86)	5.86 (85)	6.55 (95)

Fr: Radialkraft gemessen in der Mitte der Motorwelle

Fa: Axialkraft (wirkt axial auf die Motorwelle)

\* Differenzdruck zwischen A und B.

Für weitere Kräfte nehmen Sie bitte mit uns Kontakt auf.



# Konfigurator für MA Motoren

MA	...	C	..	..	U2	.	.	..	..
01	02	03	04	05	06	07	08	09	10

Um die Bestellbezeichnung Ihres Motors zu ermitteln wählen Sie aus den Optionen 02, 04, 05, 07, 08, 09 und 10 in der Auswahltablelle.

Motor																
01	Motor															MA

Schluckvolumen																	
02		10	12	18	25	32	41	45	50	63	80	90	108R	125	160	180	

Flansch																	
03		SAE B 2 Loch					SAE C 4 Loch					SAE D 4 Loch					C

Welle																			
04	Zahnwelle SAE J498b	13T 1632 DP SAE B	13T 1632 DP SAE B	13T 1632 DP SAE B	14T 12/24 DP SAE C	14T 12/24 DP SAE C	14T 12/24 DP SAE C	14T 12/24 DP SAE C	14T 12/24 DP SAE C	14T 12/24 DP SAE C	14T 12/24 DP SAE C	14T 12/24 DP SAE C	13T 8/16 DP SAE D	13T 8/16 DP SAE D	13T 8/16 DP SAE D	13T 8/16 DP SAE D	S1		
		-	-	-	-	-	-	-	-	-	-	-	17T 12/24 DP SAE CC	17T 12/24 DP SAE CC	-	-	-	-	S2
		-	-	-	-	-	-	-	-	-	-	-	21T 1632 DP	21T 1632 DP	-	-	-	-	S3
	DIN 6885	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Ø50 mm	Ø50 mm	D1	
	SAE J744 zylindrische Welle	Ø1"	Ø1"	Ø1"	Ø1 1/4"	Ø1 1/4"	Ø1 1/4"	Ø1 1/4"	Ø1 1/4"	Ø1 1/4"	Ø1 1/4"	Ø1 1/2"	Ø1 1/2"	Ø1 3/4"	Ø1 3/4"	-	-	K1	
-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	K2		

Anschlüsse A und B																			
05	SAE Flanschanschluss	Unten	0	-	-	-	-	•	•	•	•	•	•	•	•	•	•	L0	
		Hinten	0	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	M0
		Seitlich	0	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	N0
	Gewindeanschluss	Seitlich	1	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	N1
			0	•	•	•	•	•	•	-	-	-	-	-	-	-	-	-	Q0
		Hinten	1	-	-	-	•	•	•	-	-	-	-	-	-	-	-	-	Q1
0	•	•	•	•	•	•	•	-	-	-	-	-	-	-	-	-	P0		

0 = nicht möglich für Einsatz mit Ventilen  
1 = Für Einsatz von Spülventilen

Leckölanschlüsse T1 und T2																		
06		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	U2

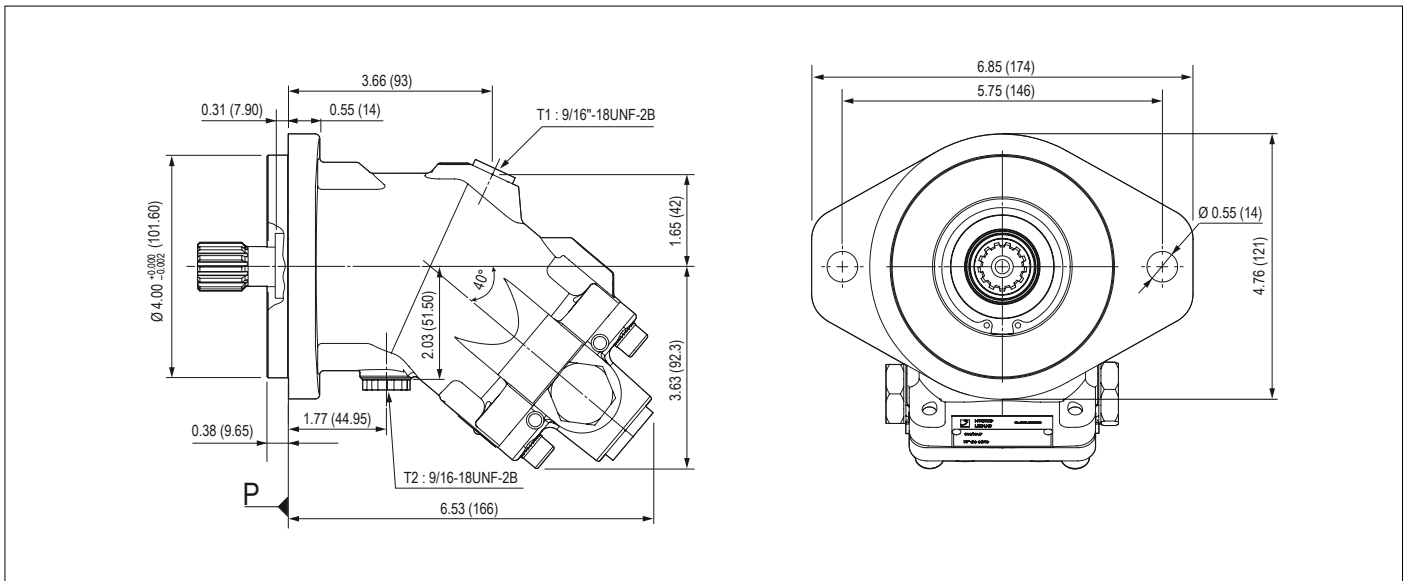
Vorbereitet für Betrieb mit Drehzahlsensor																			
07	Ja	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	1
	Nein	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	0

Drehzahlsensor																			
08	Ja	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	1
	Nein	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	0

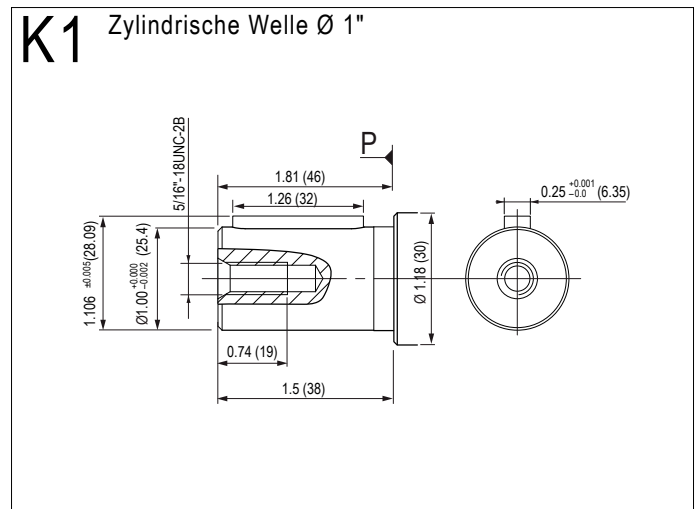
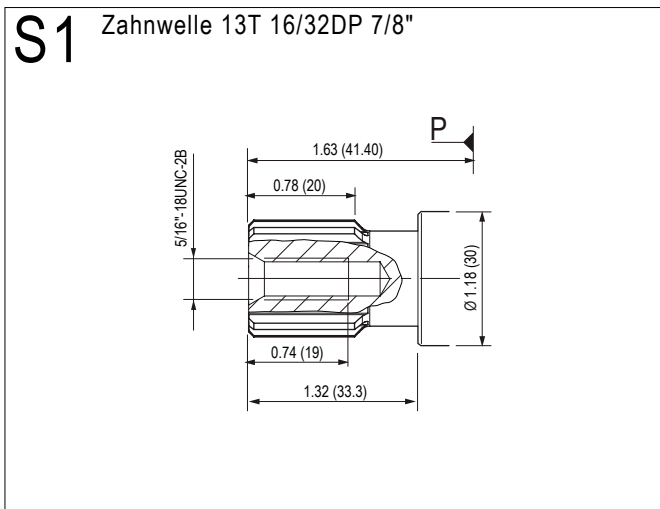
Ventile																			
09	Ohne	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	SV
	Mit Spülventil	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	VB

Tiefteperaturausführung																			
10	Ja (NBR)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	N
	Nein (FKM)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	F

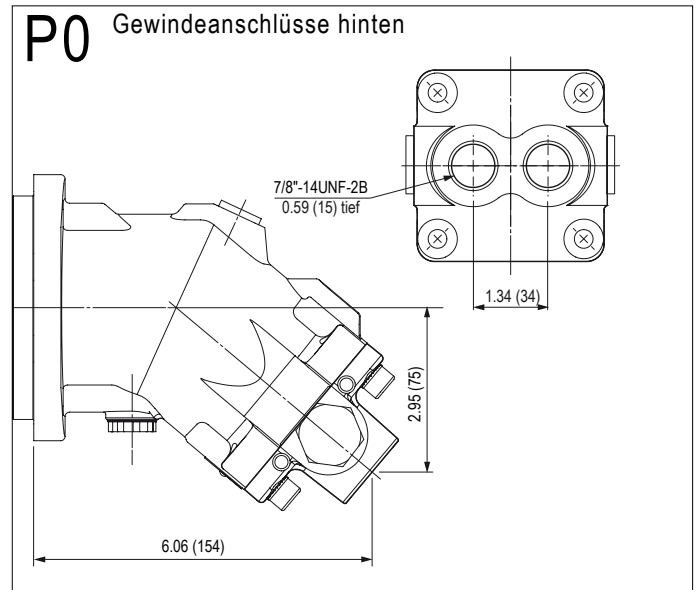
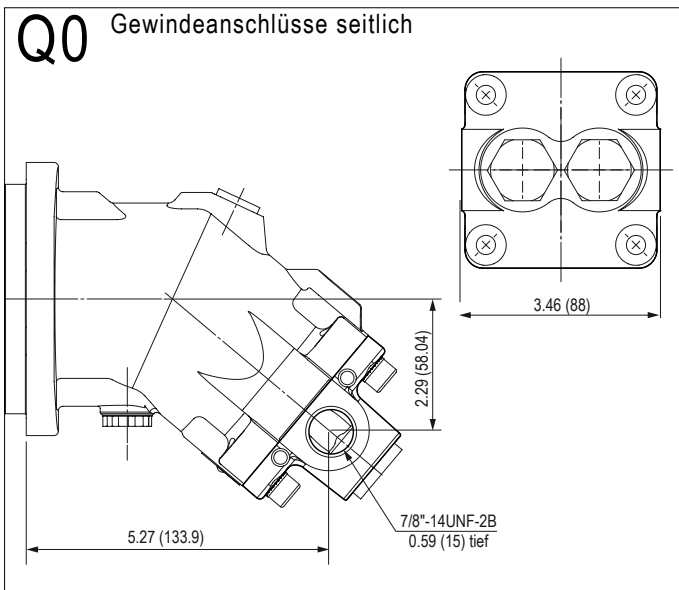
MA Serie

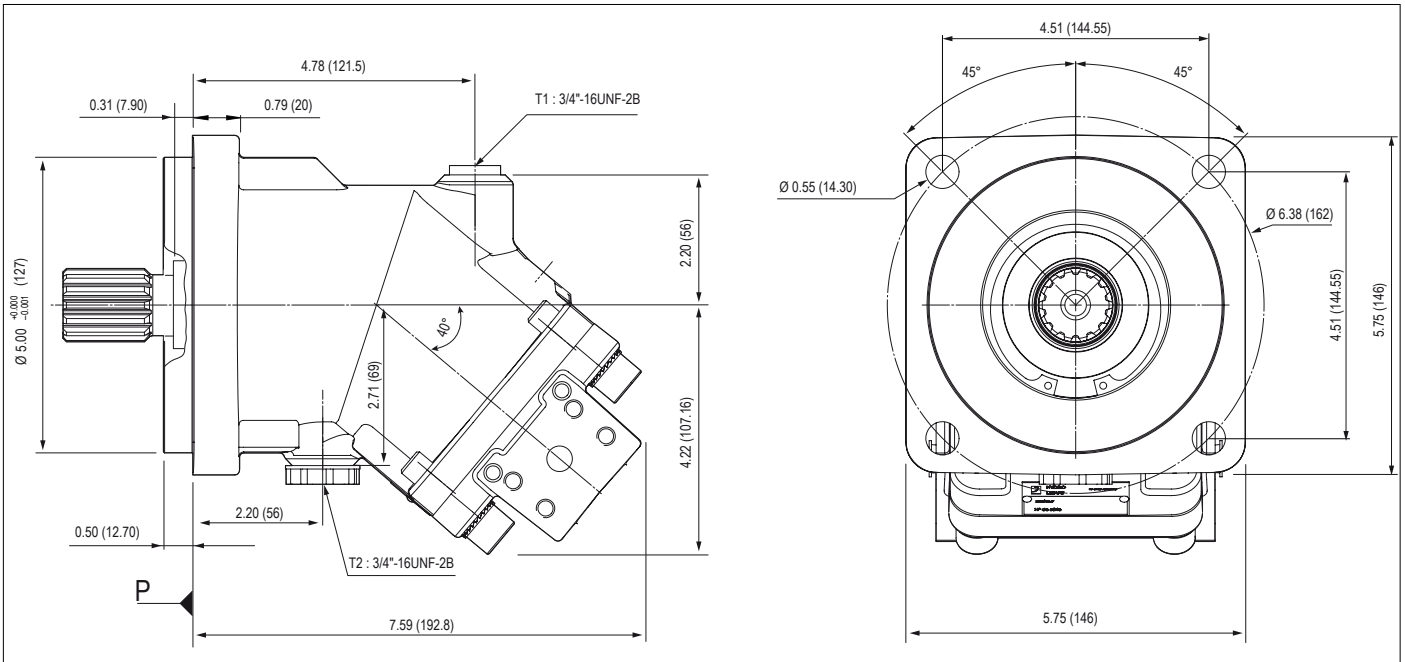


► Wellenausführung



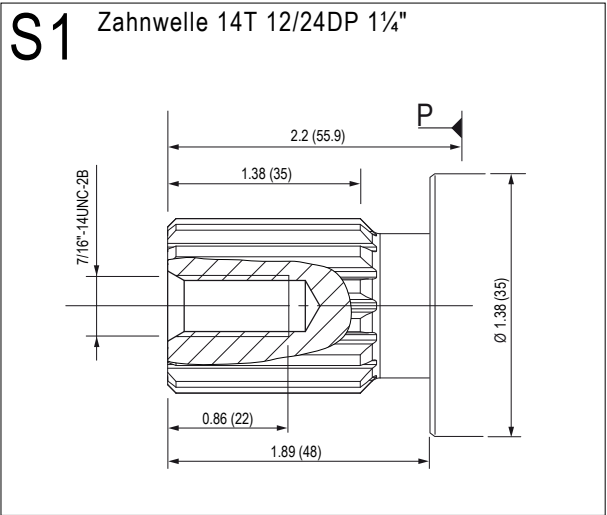
► Eintritt / Austritt



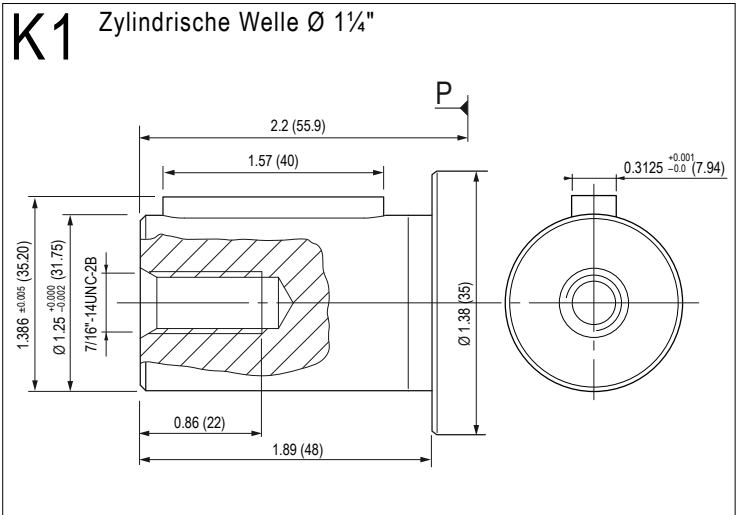


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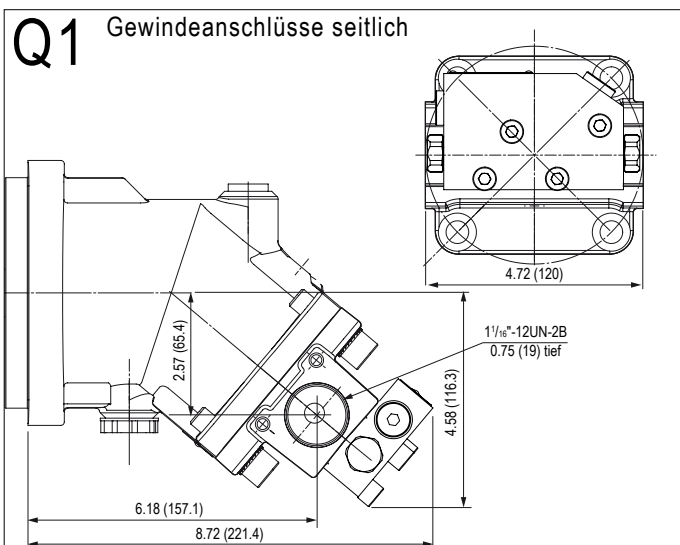
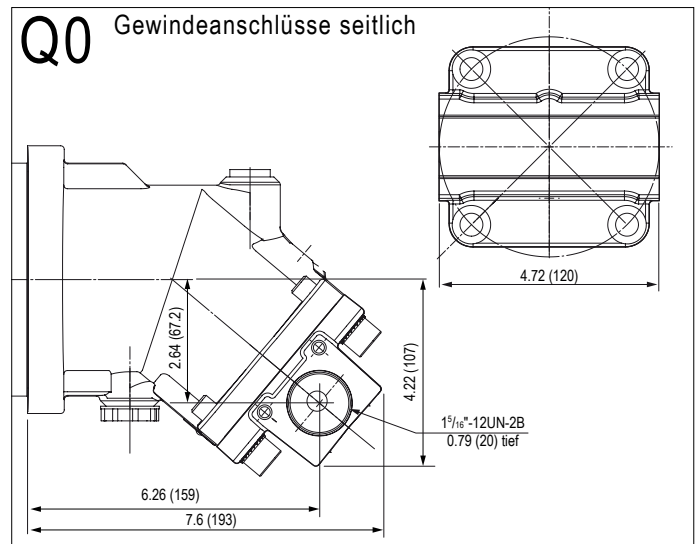
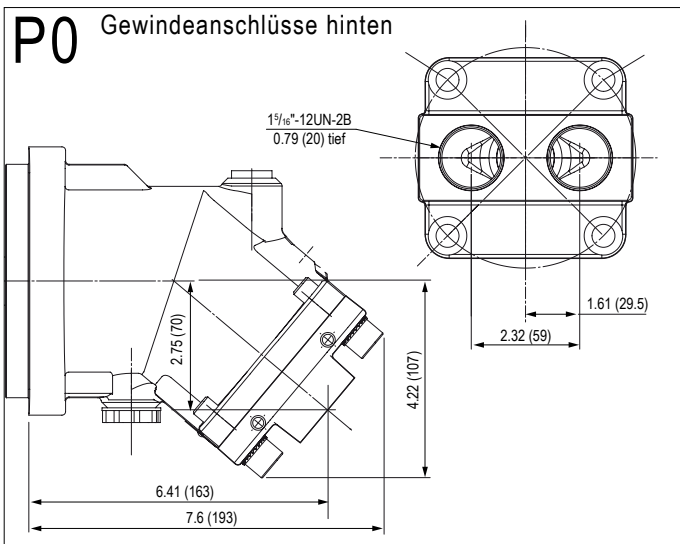
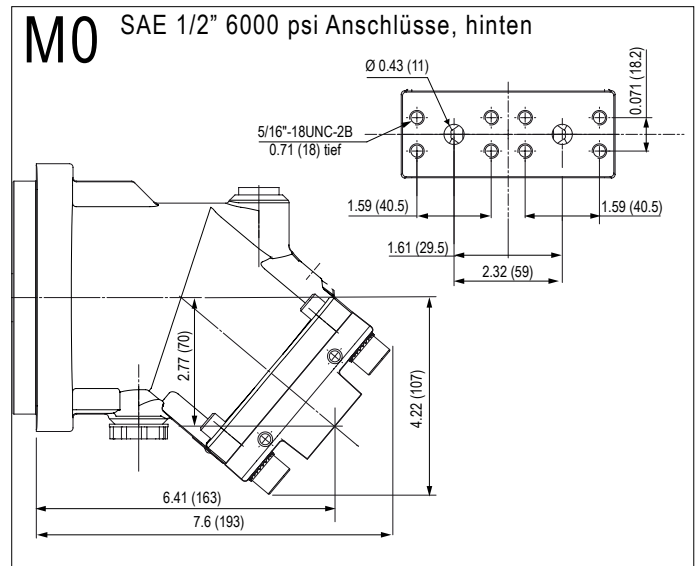
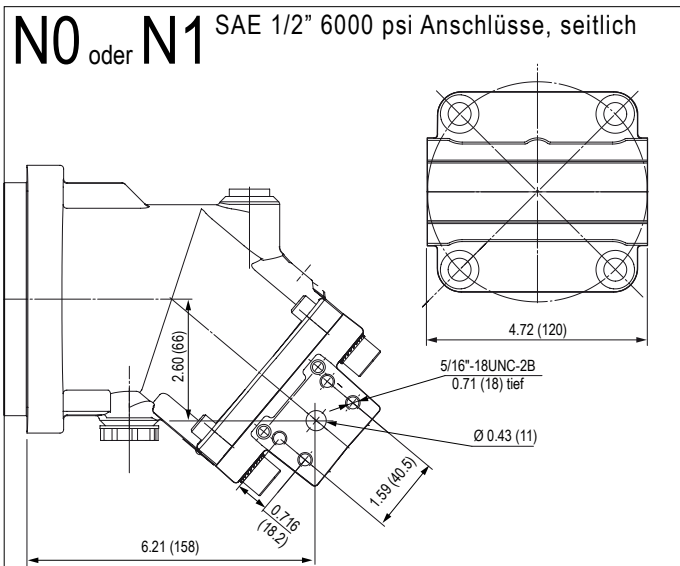
**S1** Zahnwelle 14T 12/24DP 1/4"



**K1** Zylindrische Welle  $\varnothing 1/4$ "

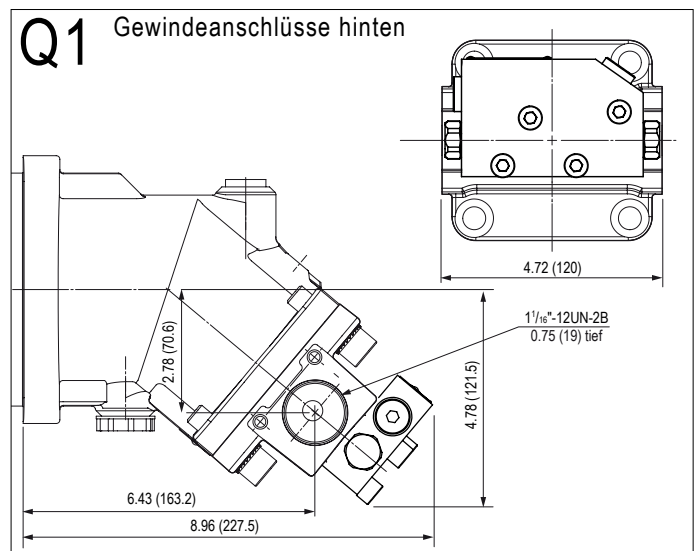
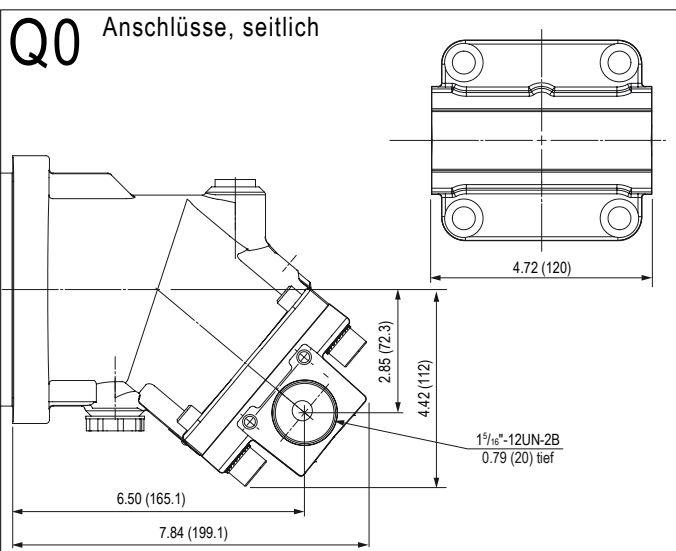
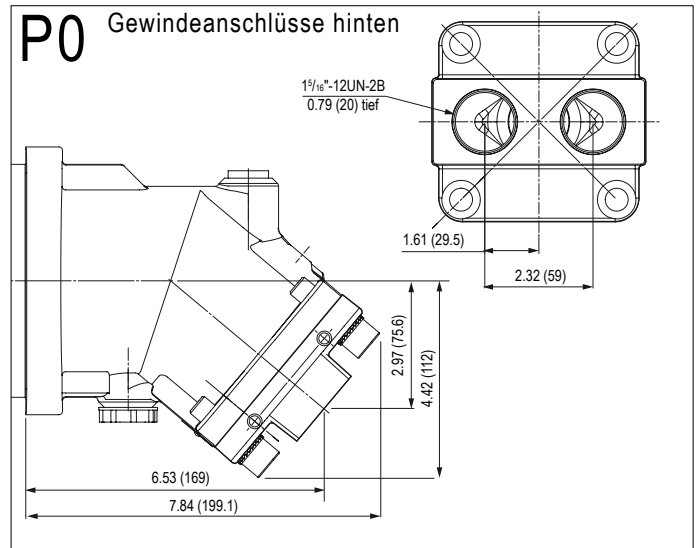
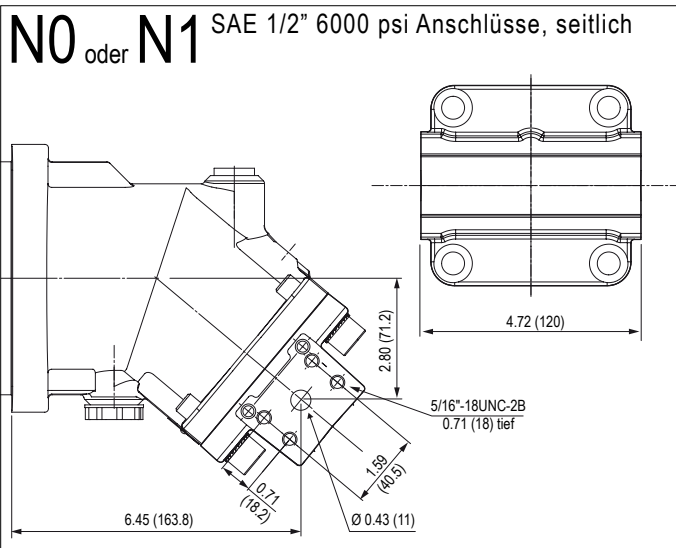
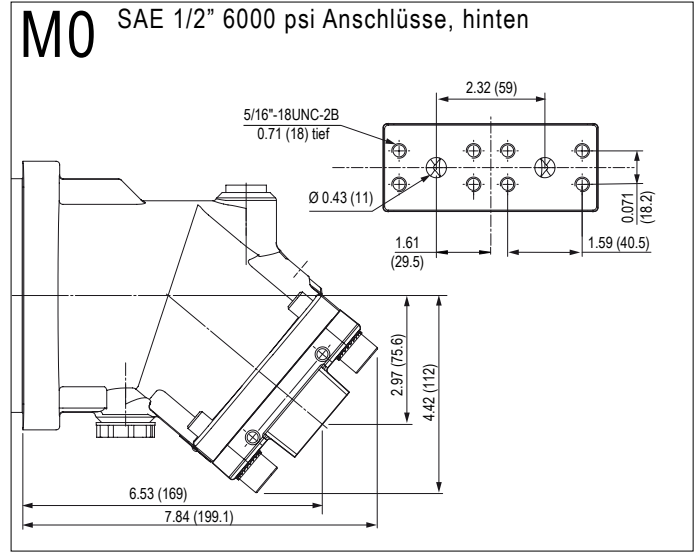
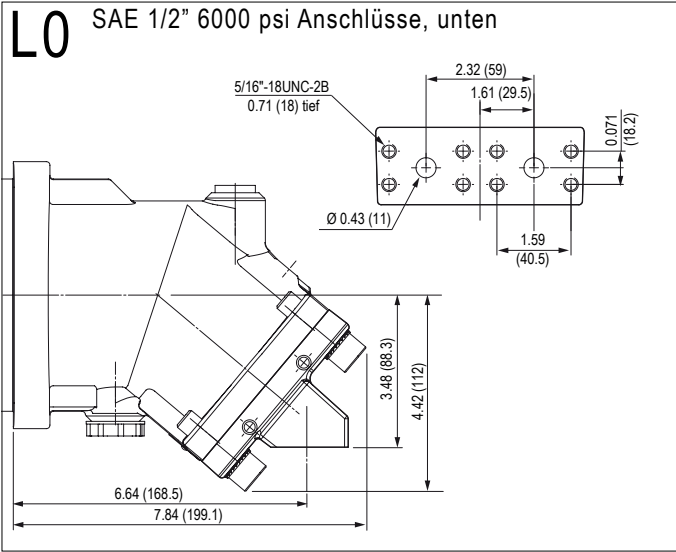


## ► Eintritt / Austritt

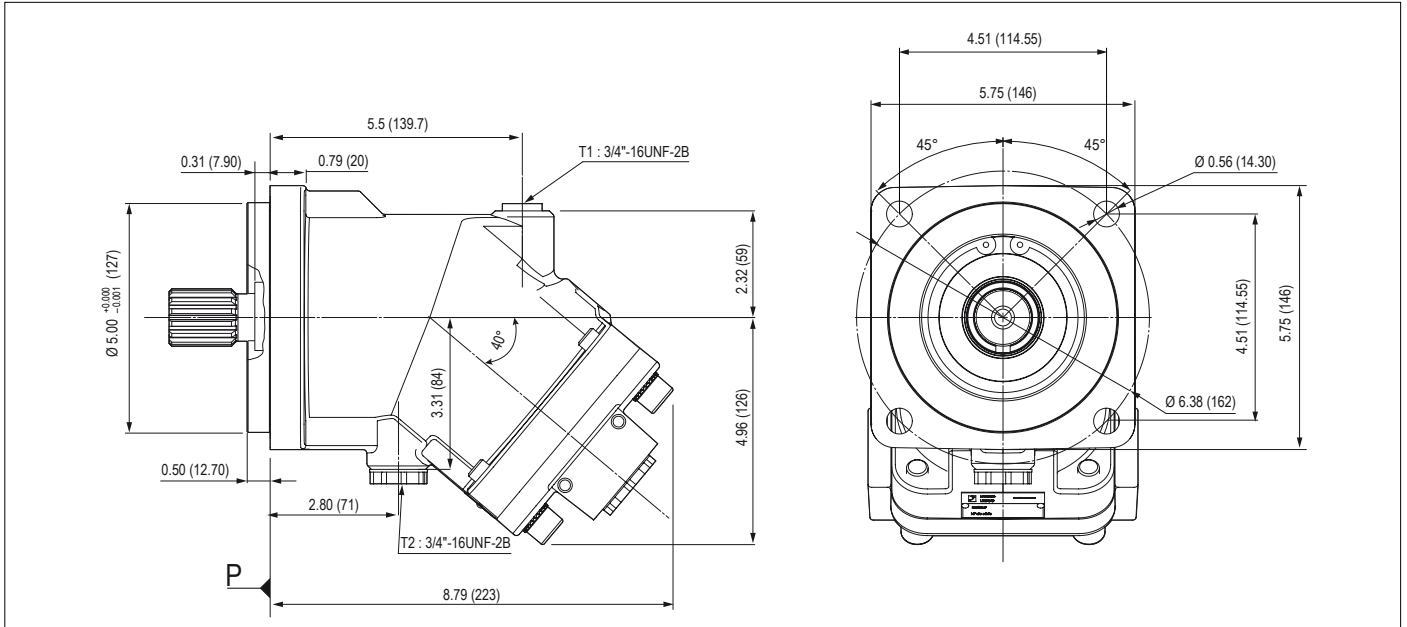




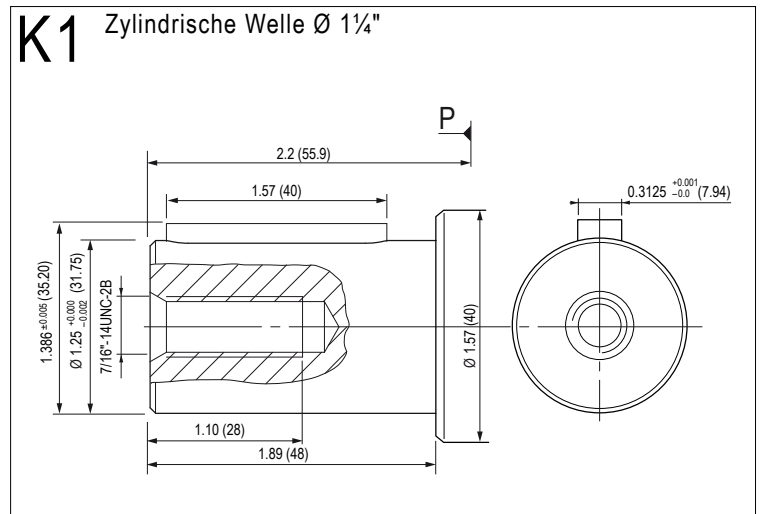
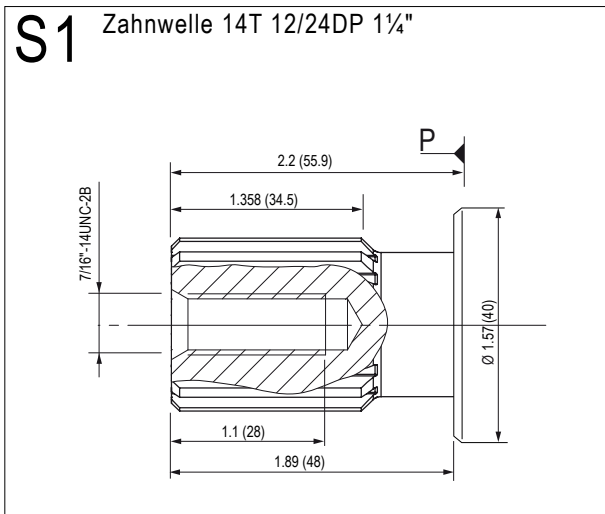
► Eintritt / Austritt



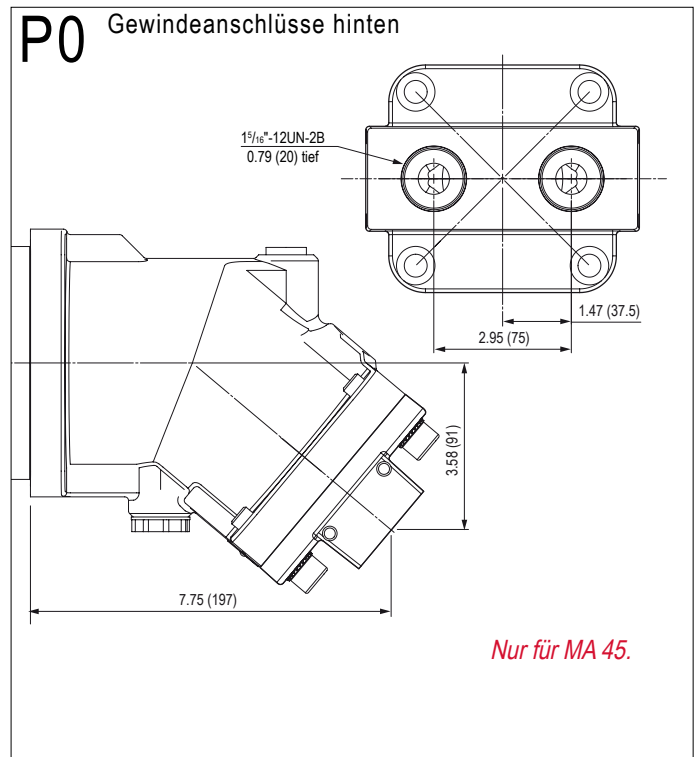
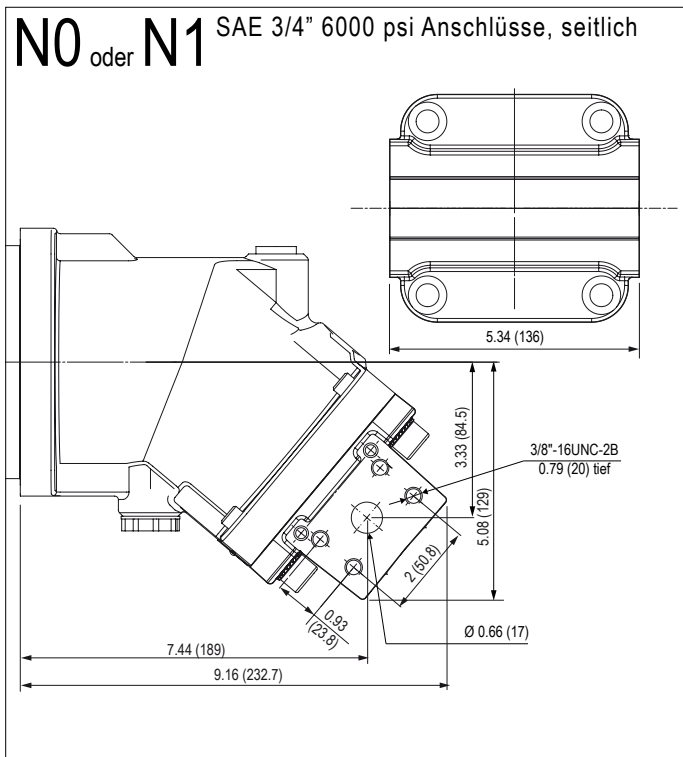
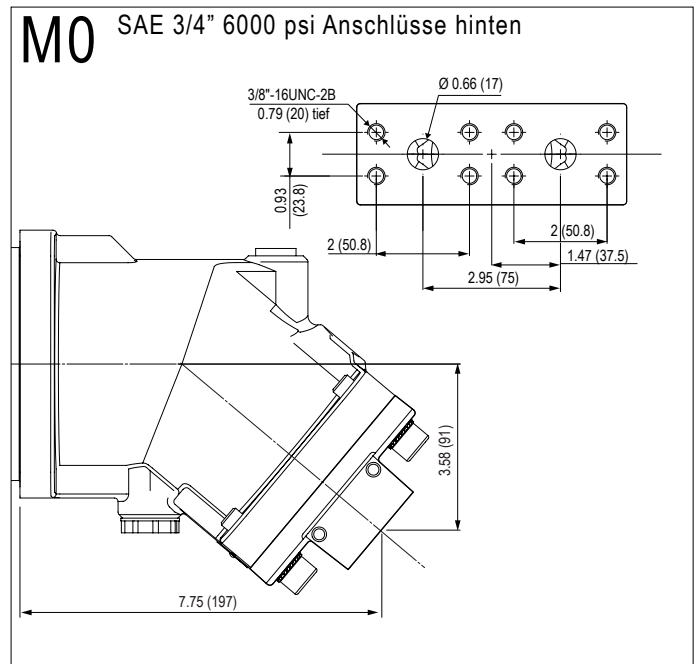
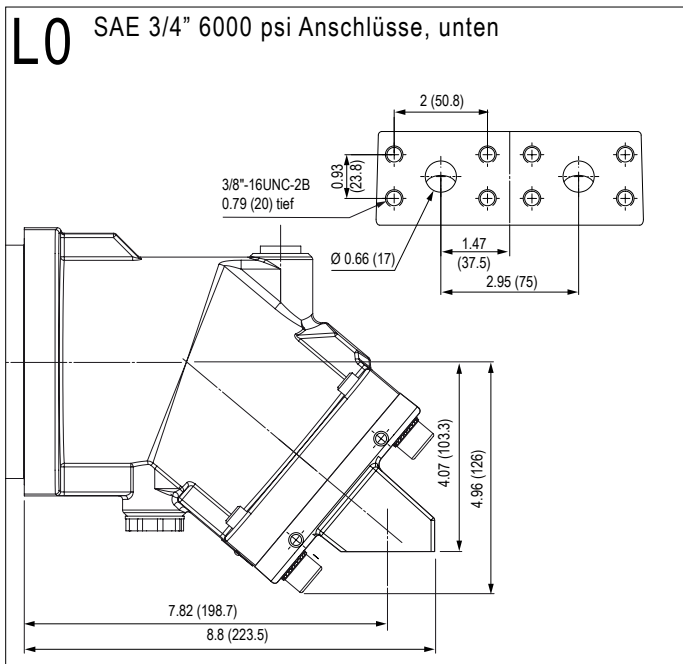




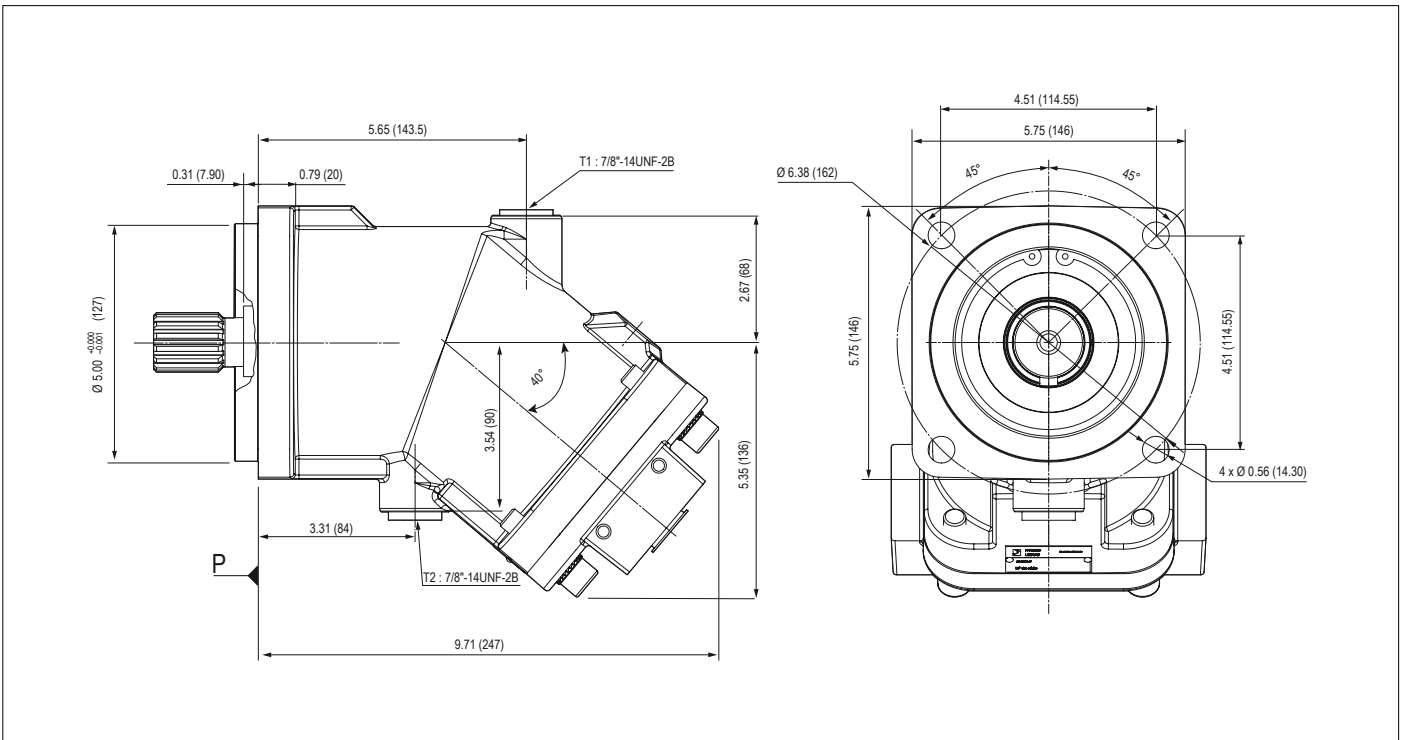
► Wellenausführung



► Eintritt / Austritt

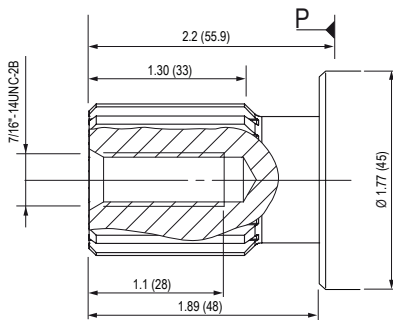


Nur für MA 45.



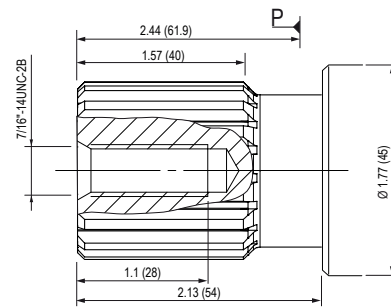
► Wellenausführung

**S1** Zahnwelle 14T 12/24DP 1¼"

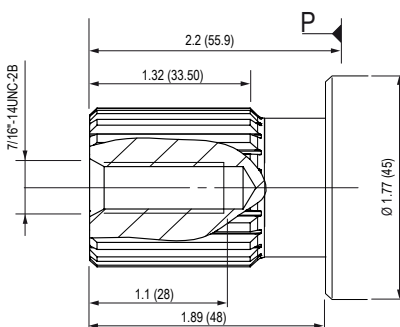


Max. Druck 350 bar (5076 psi) für MA 80.  
Max. Druck 320 bar (4495 psi) für MA 90.

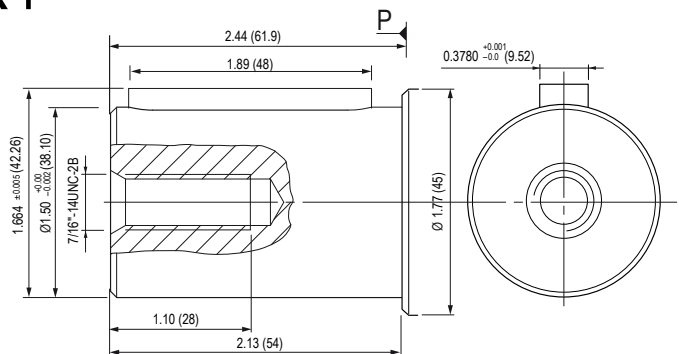
**S2** Zahnwelle 17T 12/24DP 1½"



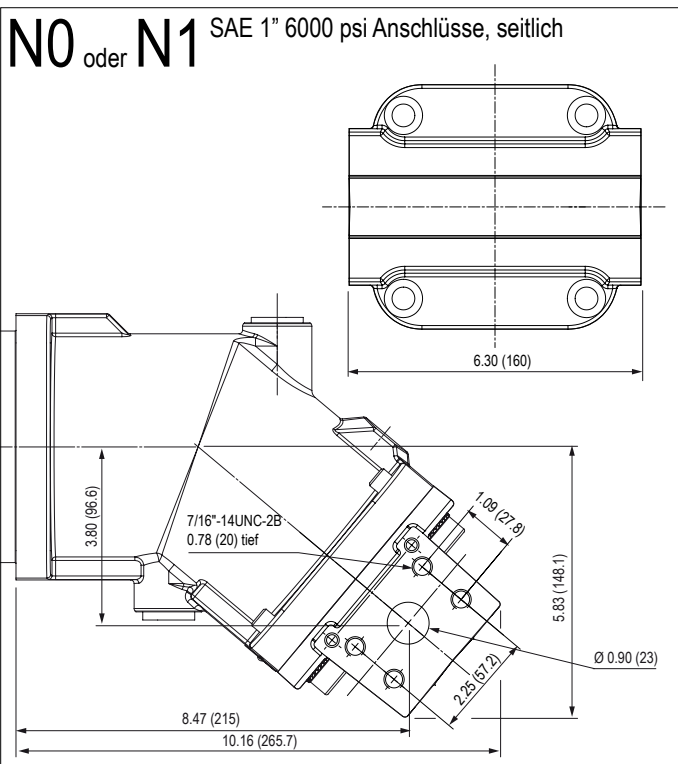
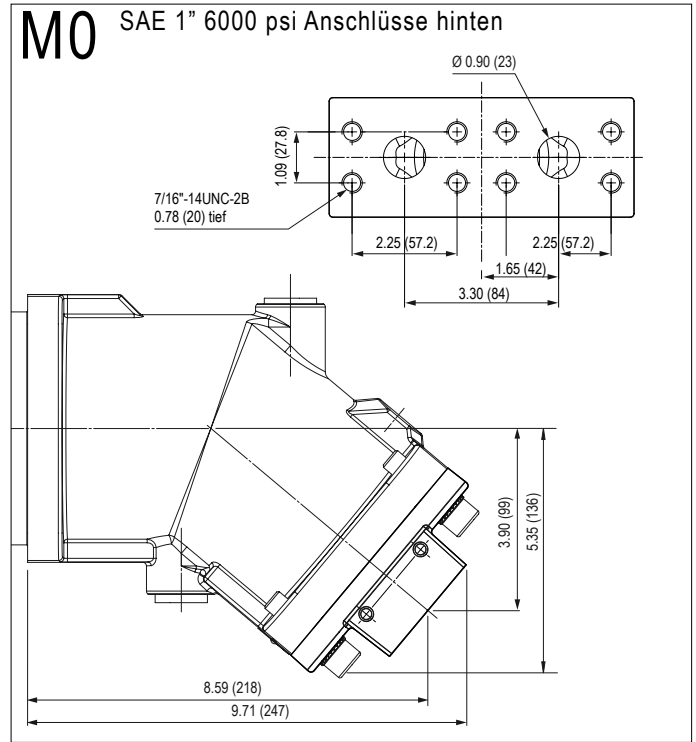
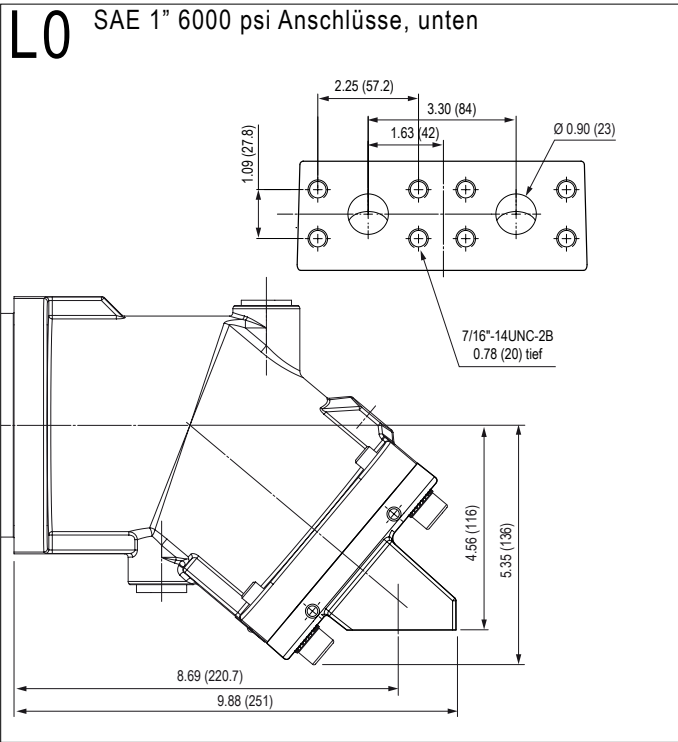
**S3** Zahnwelle 21T 16/32DP 1⅜"

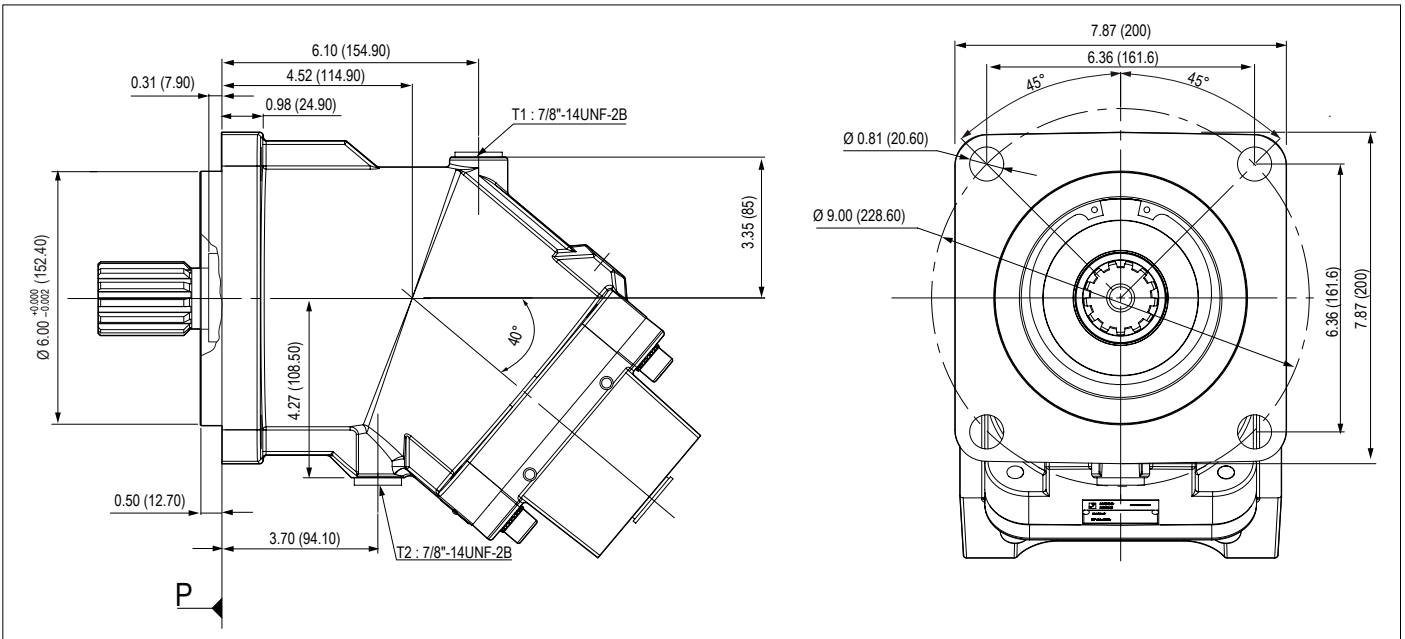


**K1** Zylindrische Welle Ø 1½"

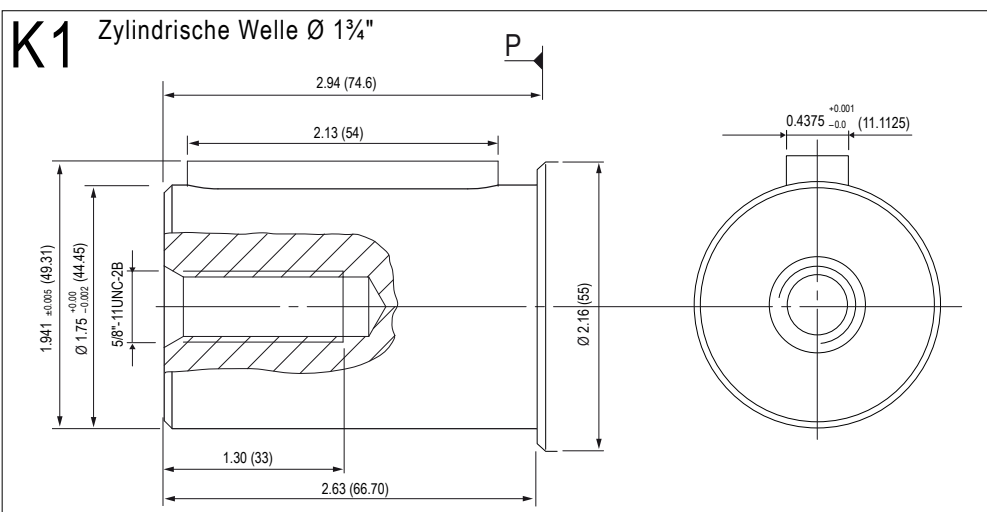
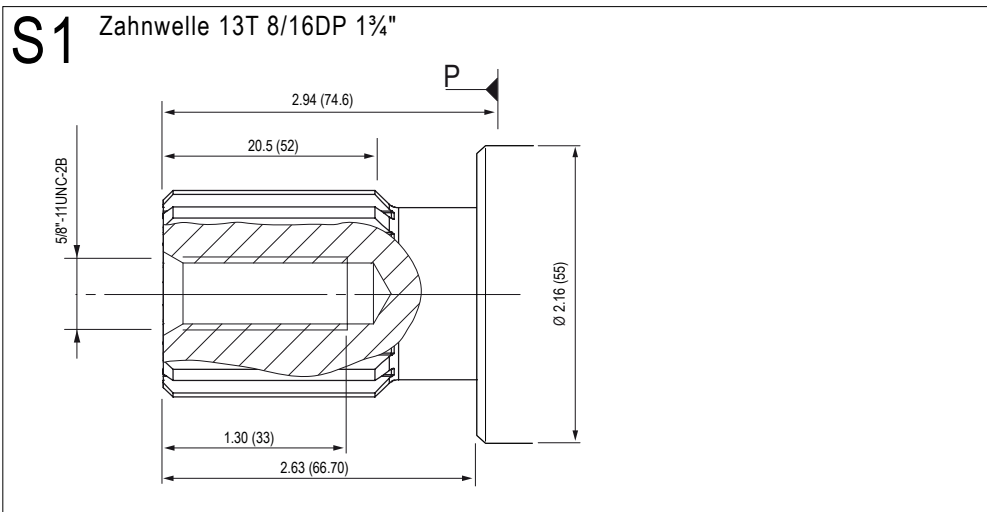


## ► Eintritt / Austritt





► Wellenausführung

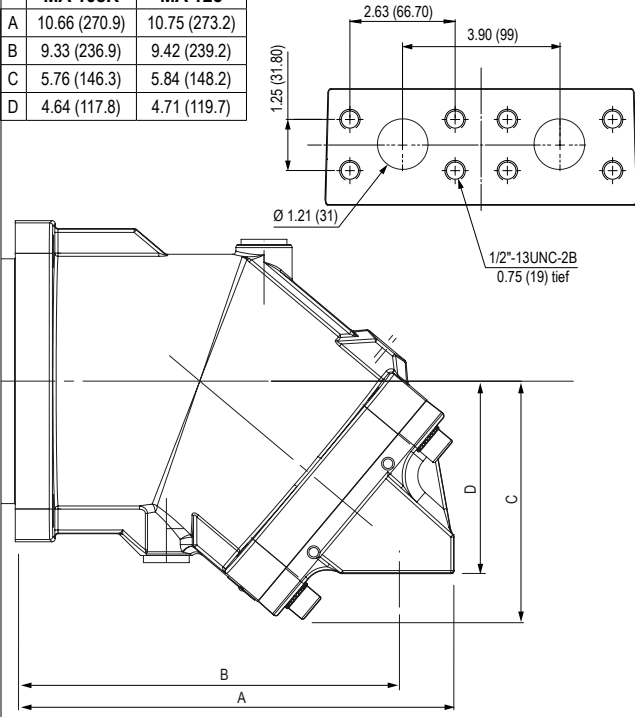


# MA 108 R - 125

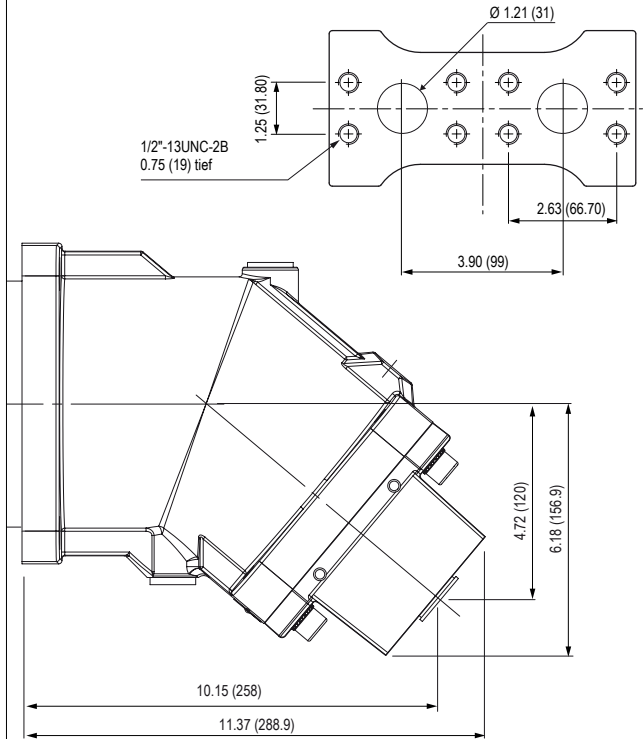
## ► Eintritt / Austritt

### L0 SAE 1/4" 6000 psi Anschlüsse hinten

	MA 108R	MA 125
A	10.66 (270.9)	10.75 (273.2)
B	9.33 (236.9)	9.42 (239.2)
C	5.76 (146.3)	5.84 (148.2)
D	4.64 (117.8)	4.71 (119.7)

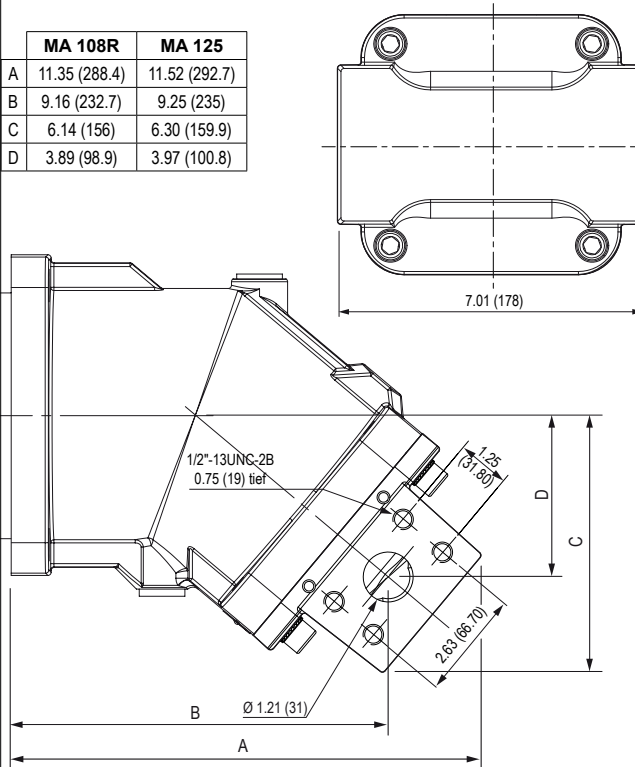


### M0 SAE 1/4" 6000 psi Anschlüsse, unten

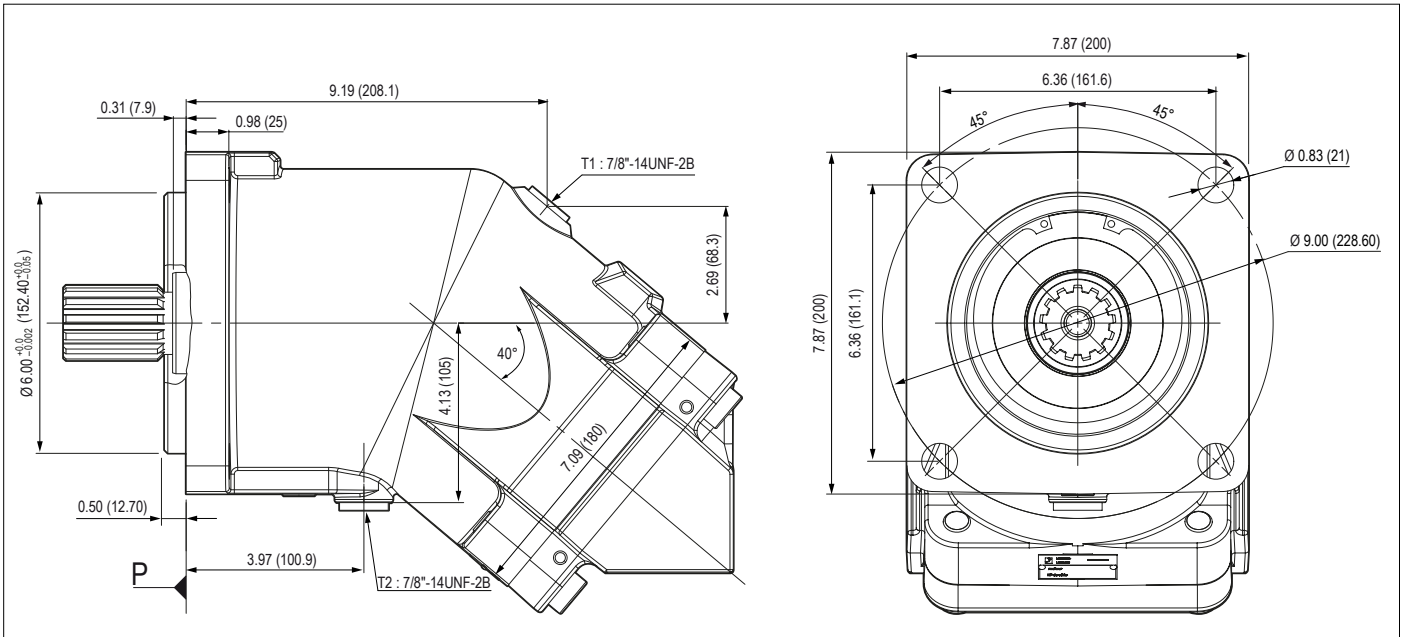


### N0 oder N1 SAE 1/4" 6000 psi Anschlüsse, seitlich

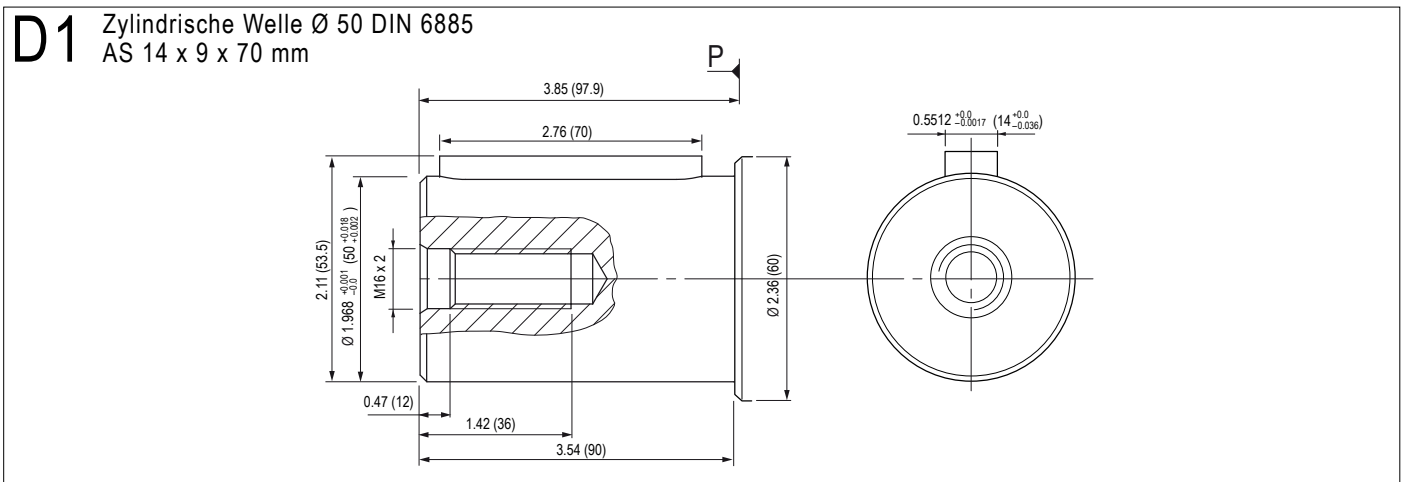
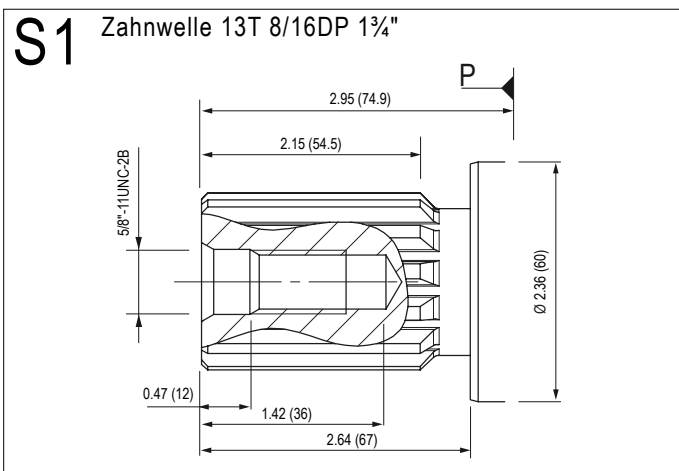
	MA 108R	MA 125
A	11.35 (288.4)	11.52 (292.7)
B	9.16 (232.7)	9.25 (235)
C	6.14 (156)	6.30 (159.9)
D	3.89 (98.9)	3.97 (100.8)



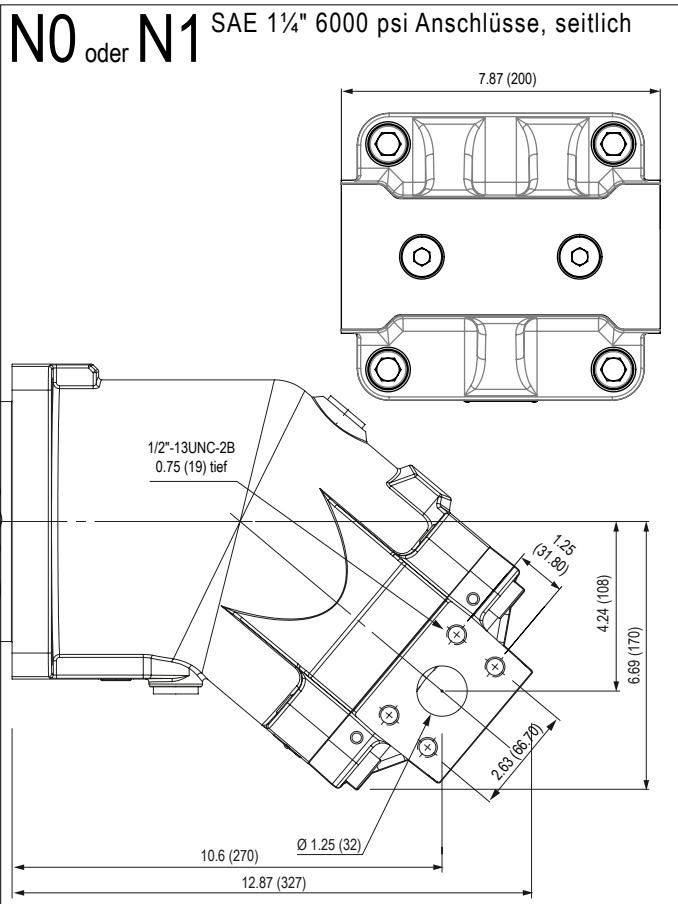
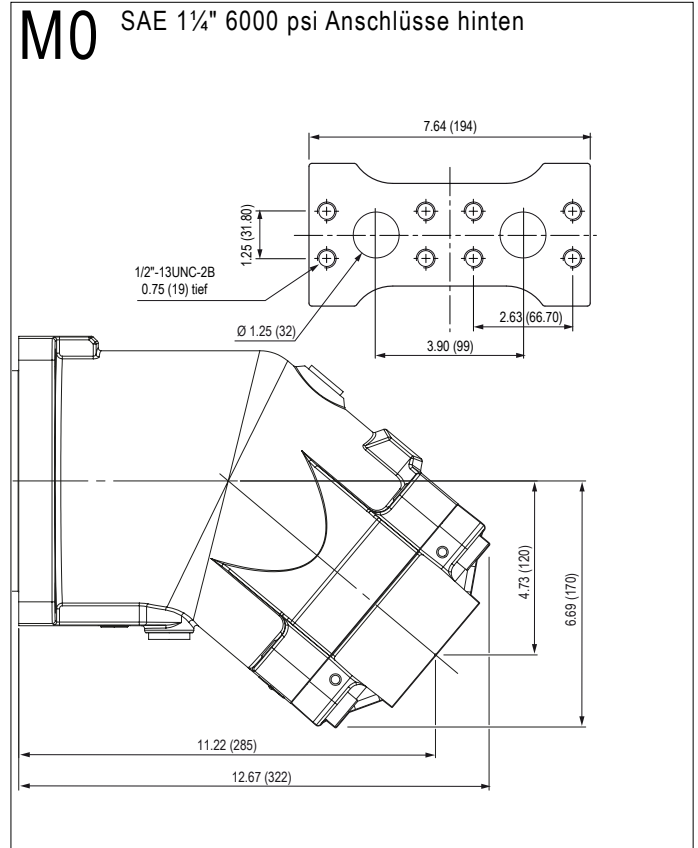
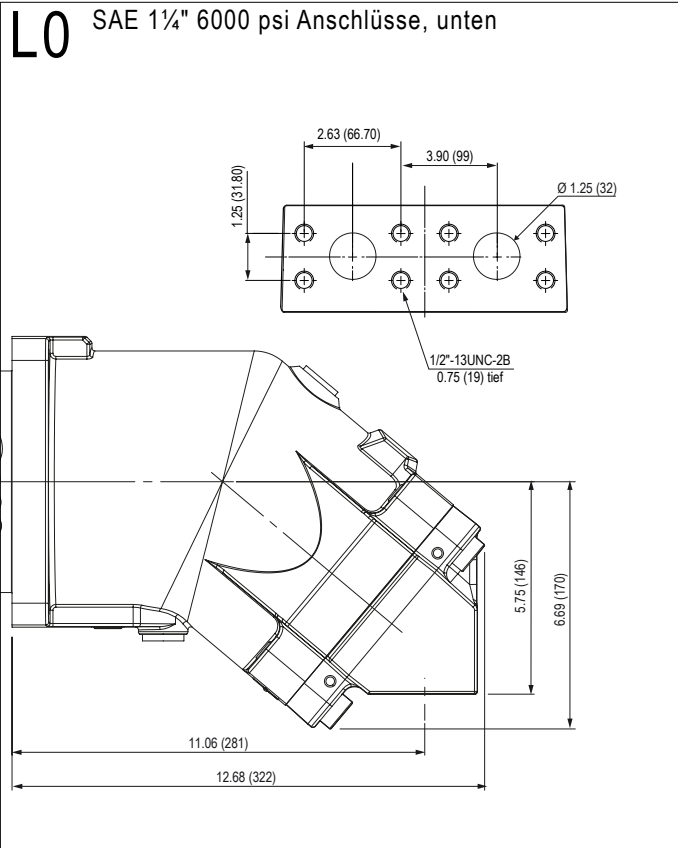
Maßangaben (mm) sind Anhaltswerte.



► Wellenausführung



## ► Eintritt / Austritt



Maßangaben (mm) sind Anhaltswerte.