

Lamellenbremse Serie LB



Bestellnr.	Typ	Code
080-300-01000	Lamellenbremse - Eing.Ø25-Ausg.Ø25 - 7daNm	LB-288-C-7-C
080-300-01050	Lamellenbremse - Eing.Ø25-Ausg.Ø25 - 14daNm	LB-288-C-14-C
080-300-01100	Lamellenbremse - Eing.Ø25-Ausg.Ø25 - 21daNm	LB-288-C-21-C
080-300-01150	Lamellenbremse - Eing.Ø25-Ausg.Ø25 - 32daNm	LB-288-C-32-C
080-300-01200	Lamellenbremse - Eing.Ø25-Ausg.Ø25 - 43daNm	LB-288-C-43-C
080-300-01250	Lamellenbremse - Eing.Ø25-Ausg.Ø25 - 63daNm	LB-288-C-63-C
080-300-01300	Lamellenbremse - Eing.Ø25-Ausg.Ø32 - 7daNm	LB-288-C-7-CB
080-300-01350	Lamellenbremse - Eing.Ø25-Ausg.Ø32 - 14daNm	LB-288-C-14-CB
080-300-01400	Lamellenbremse - Eing.Ø25-Ausg.Ø32 - 21daNm	LB-288-C-21-CB
080-300-01450	Lamellenbremse - Eing.Ø25-Ausg.Ø32 - 32daNm	LB-288-C-32-CB
080-300-01500	Lamellenbremse - Eing.Ø25-Ausg.Ø32 - 43daNm	LB-288-C-43-CB
080-300-01550	Lamellenbremse - Eing.Ø25-Ausg.Ø32 - 63daNm	LB-288-C-63-CB
080-300-01600	Lamellenbremse - Eing.Ø32-Ausg.Ø25 - 7daNm	LB-288-CB-7-C
080-300-01650	Lamellenbremse - Eing.Ø32-Ausg.Ø25 - 14daNm	LB-288-CB-14-C
080-300-01700	Lamellenbremse - Eing.Ø32-Ausg.Ø25 - 21daNm	LB-288-CB-21-C
080-300-01750	Lamellenbremse - Eing.Ø32-Ausg.Ø25 - 32daNm	LB-288-CB-32-C
080-300-01800	Lamellenbremse - Eing.Ø32-Ausg.Ø25 - 43daNm	LB-288-CB-43-C
080-300-01850	Lamellenbremse - Eing.Ø32-Ausg.Ø25 - 63daNm	LB-288-CB-63-C
080-300-01900	Lamellenbremse - Eing.Ø32-Ausg.Ø32 - 7daNm	LB-288-CB-7-CB
080-300-01950	Lamellenbremse - Eing.Ø32-Ausg.Ø32 - 14daNm	LB-288-CB-14-CB
080-300-02000	Lamellenbremse - Eing.Ø32-Ausg.Ø32 - 21daNm	LB-288-CB-21-CB
080-300-02050	Lamellenbremse - Eing.Ø32-Ausg.Ø32 - 32daNm	LB-288-CB-32-CB
080-300-02100	Lamellenbremse - Eing.Ø32-Ausg.Ø32 - 43daNm	LB-288-CB-43-CB
080-300-02150	Lamellenbremse - Eing.Ø32-Ausg.Ø32 - 63daNm	LB-288-CB-63-CB

HYDRAULIC DISC BRAKES LB, LBS, LBV- Wet



APPLICATION

- » Heavy Duty machinery
- » Wheel drives
- » Material handling
- » Mining
- » Agriculture
- » Conveyors
- » Door openers and swing drives etc.



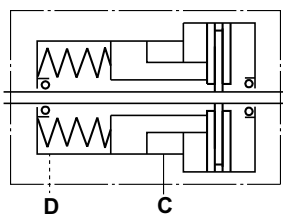
GENERAL

Fluid type	Mineral based- HLP(DIN 51524) or HM(ISO 6743/4)
Temperature range, °C	-30 ÷ 90
Viscosity range, mm ² /s	20 ÷ 75
Filtration	ISO code 20/16 (nominal filtration of 25 micron)
Maintenance	Changed after the first 50-100 h, then after every 500-1500 h.

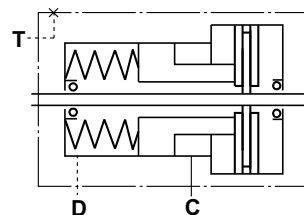
CONTENTS

Hydraulic Disc Brake for MP, MR and MS Motors type LB/288	4 ÷ 5
Hydraulic Disc Brake for MSS and MSV type LBS(V)/289	6
Hydraulic Disc Brake for MSS and MSV type LBS(V)/290	7
Specification data for LBS(LBV)/289, 290	8
Load curve for LBS(LBV)/289, 290	8
Output Shafts for LBS(LBV)/289, 290	8
Internal Spline data	9
Order code for LB/288, LBS(LBV)/289, 290	9
Hydraulic Disc Brake for MTS and MTV type LBS(LBV)/314	10
Hydraulic Disc Brake for MTS and MTV type LBS(LBV)/315	11
Specification data for LBS(LBV)/314, 315	12
Load curve for LBS(LBV)/314, 315	12
Output Shafts for LBS(LBV)/314, 315	13
Order code for LBS(LBV)/314, 315	13

LB, LBS

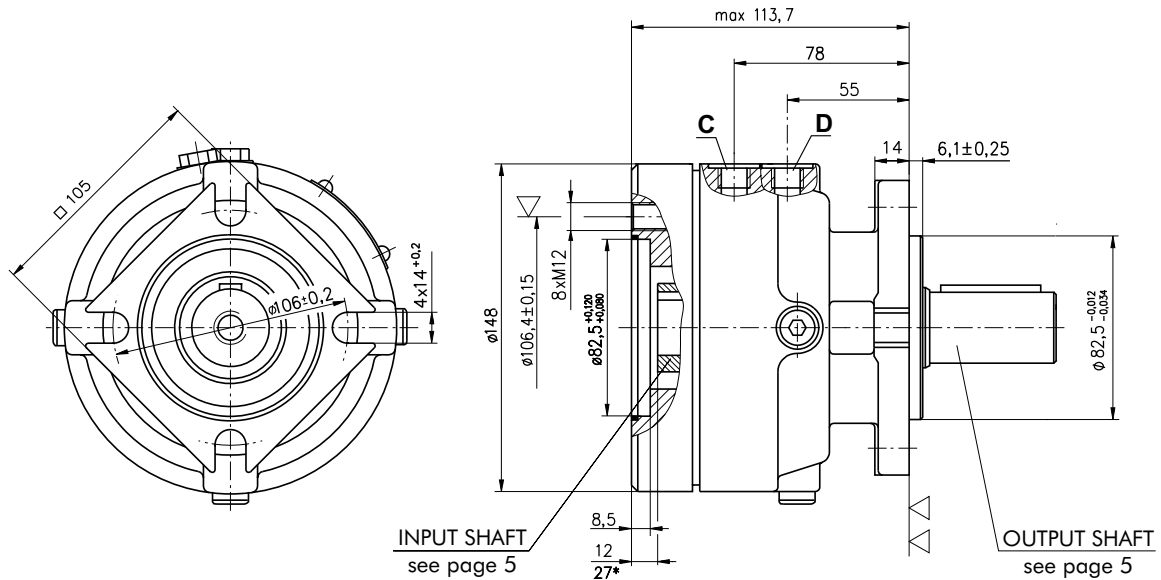


LBV



**HYDRAULIC DISC BRAKE FOR FLANGE ATTACHMENT
TO MP, MR AND MS HYDRAULIC MOTORS**

TYPE LB/288



C : Brake release Port - G¹/₄, 9 mm depth

D : Drainage tap - G¹/₄, 9 mm depth

▽- Place for attachment

(tightening torque for screw M12x30 - 8.8 DIN 912 - 7 daNm)

▽▽- Place for attachment

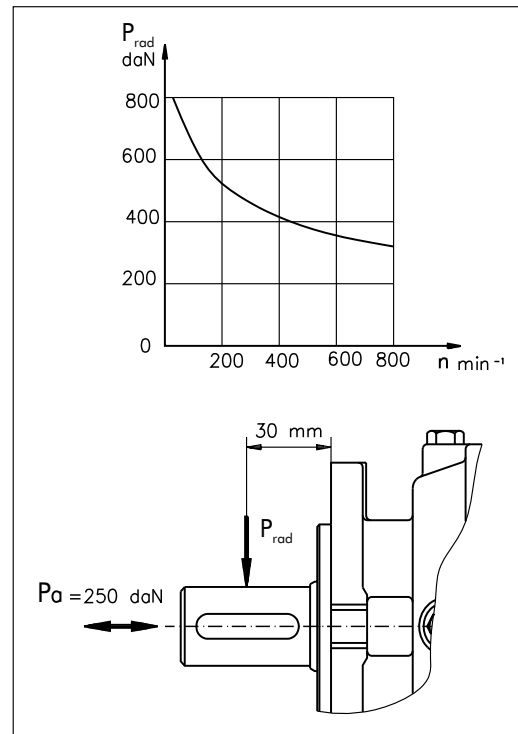
* - For Input Shaft Hole Versions **SH** and **SB**.

SPECIFICATION DATA

Description LB/288...	7	14	21	32	43	63
*Min. Static Torque [daNm]	6-8	13-15	20-22	31-34	41-45	61-64
Opening Pressure [bar]	min	4-8	9-16	17-23		
	max	300				
Min. oil quantity for brake releasing [cm ³]	7-8					
Oil volume [cm ³]	50 - 120					
Max. Pressure in drain space [bar]	0,5					
Weight [kg]	9					

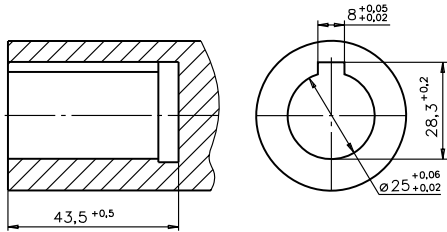
*Static torque is obtained at working pressure - 0 bar.

LOAD CURVE

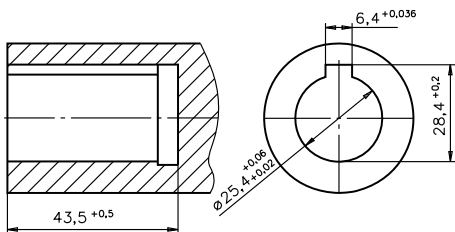


INPUT SHAFT HOLES

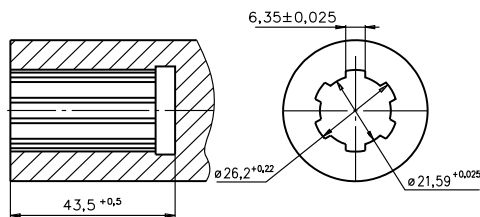
C



CO

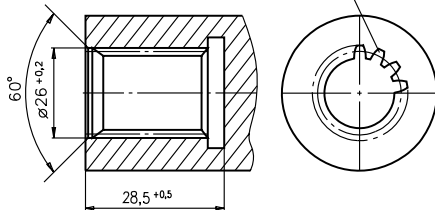


SH

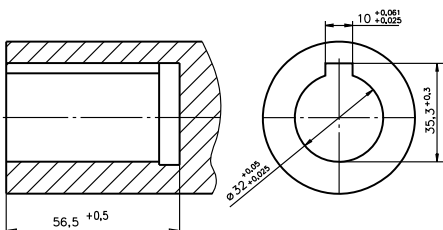


SB

Involute Splines
A25x22 H10 DIN 5482



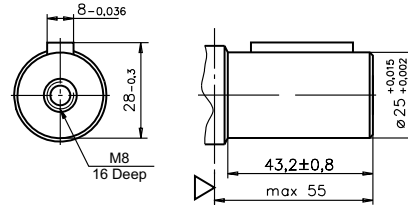
CB



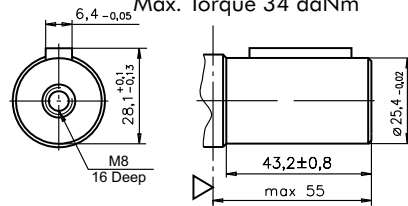
▽ - Disc Brake Mounting Surface

OUTPUT SHAFT EXTENSIONS

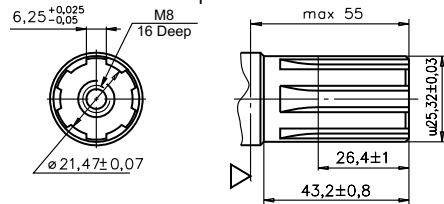
C - $\varnothing 25$ straight, Parallel key A8x7x32 DIN 6885
Max. Torque 34 daNm



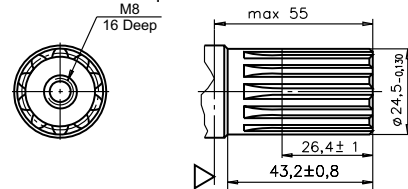
CO - $\varnothing 1"$ straight Parallel key $\frac{1}{4} \times \frac{1}{4} \times 1 \frac{1}{4}$ " BS46
Max. Torque 34 daNm



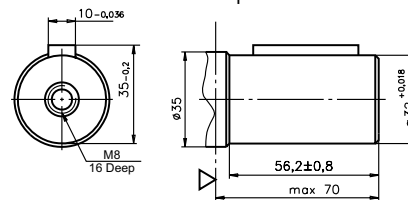
SH - splined BS 2059 (SAE 6B)
Max. Torque 40 daNm



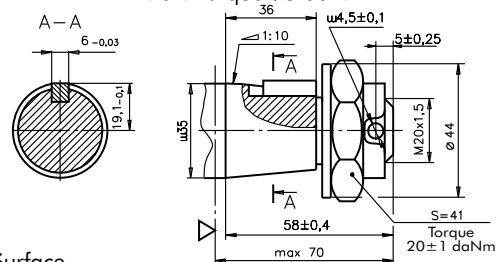
SA - splined B25x22 h9 DIN 5482
Max. Torque 40 daNm



CB - $\varnothing 32$ straight, Parallel key A10x8x45 DIN6885
Max. Torque 77 daNm

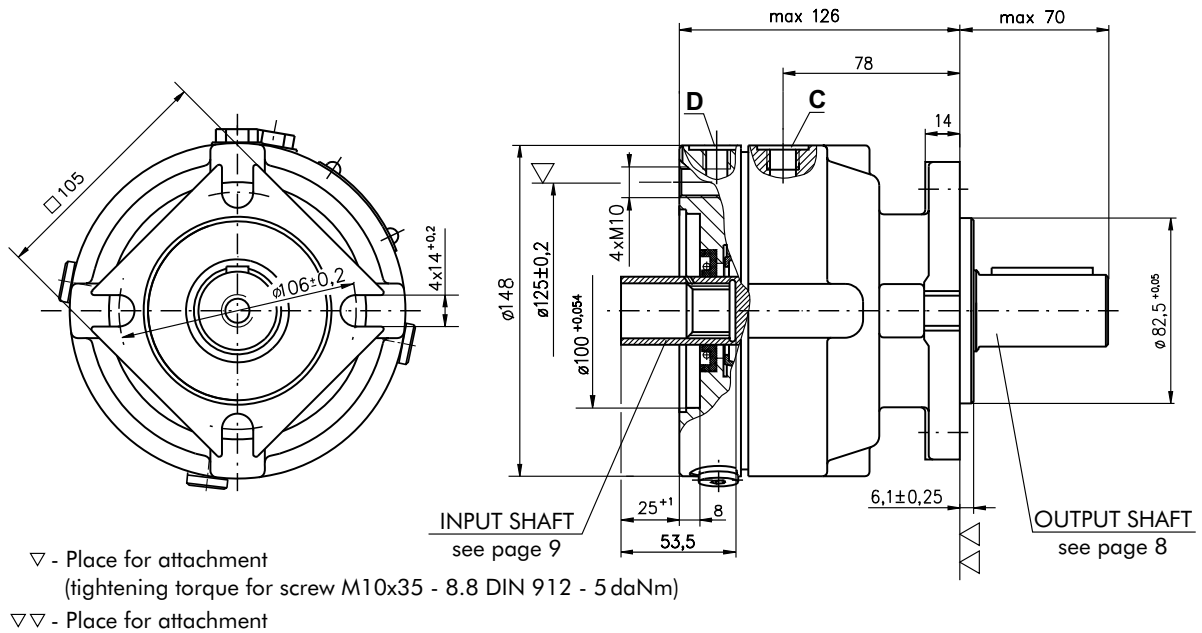


KB - tapered 1:10, Parallel key B6x6x20 DIN6885
Max. Torque 95 daNm

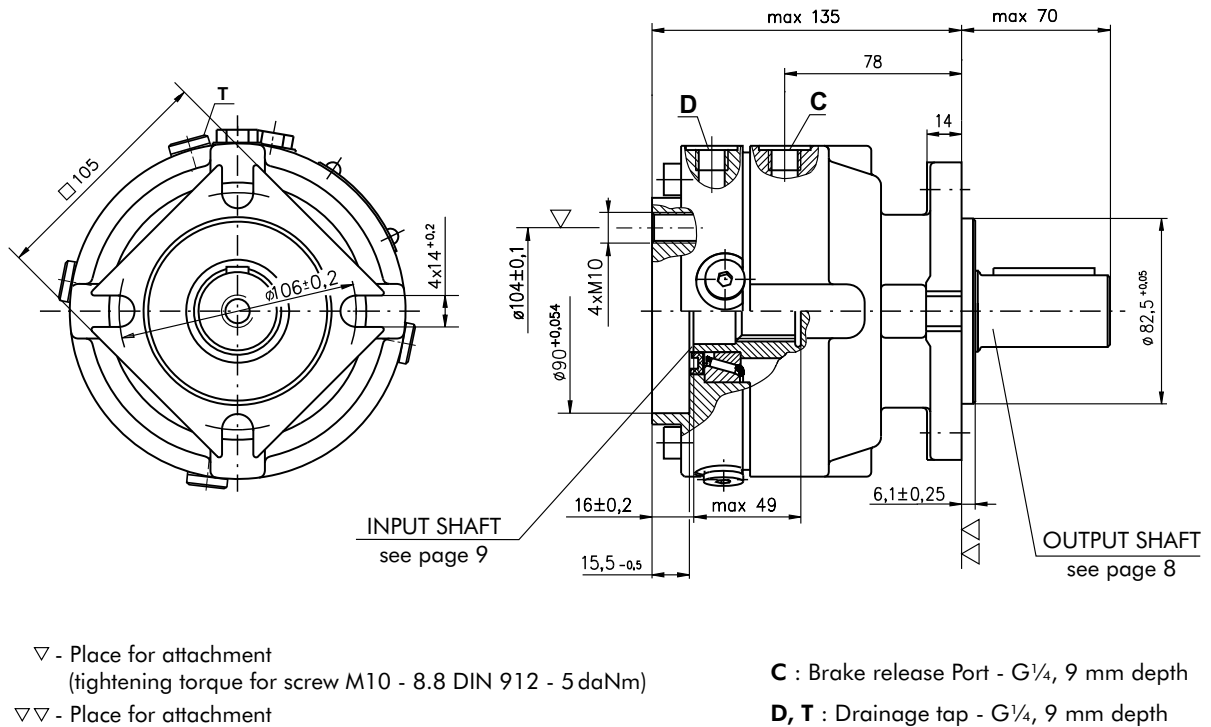


**HYDRAULIC DISC BRAKE FOR FLANGE ATTACHMENT
TO MSS AND MSV HYDRAULIC MOTORS**

TYPE LBS/289

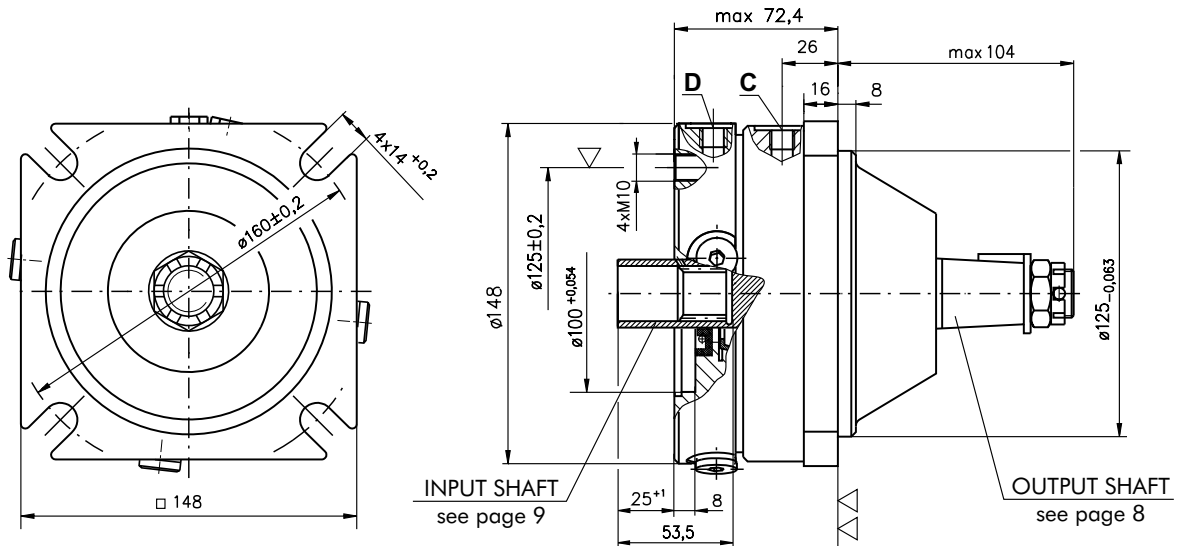


TYPE LBV/289



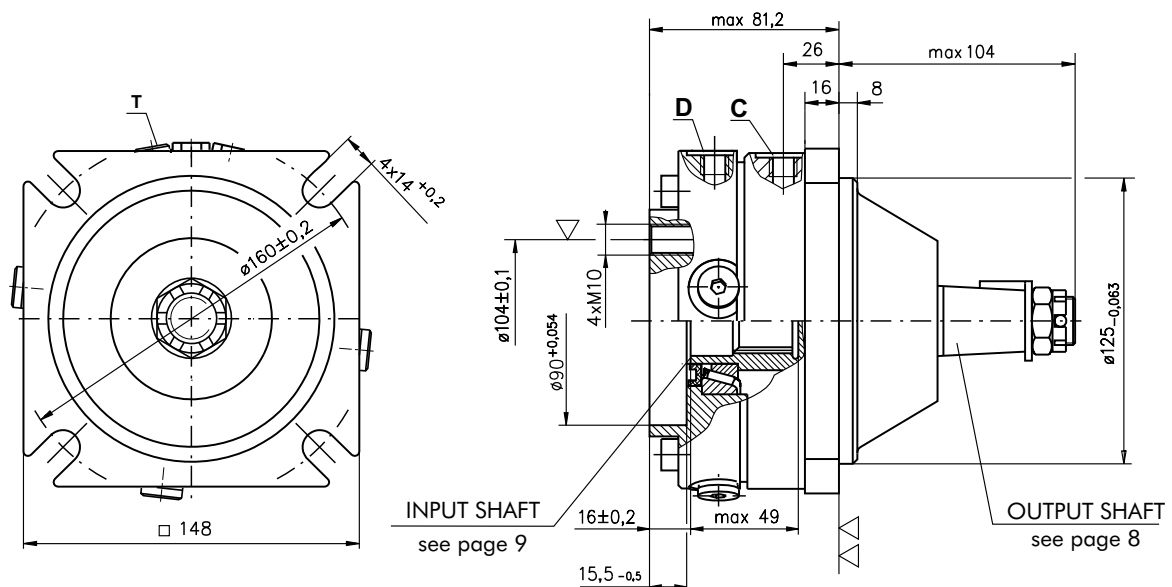
**HYDRAULIC DISC BRAKE FOR FLANGE ATTACHMENT
TO MSS AND MSV HYDRAULIC MOTORS**

TYPE LBS/290



- ▽ - Place for attachment
(tightening torque for screw M10x35 - 8.8 DIN 912 - 5 daNm)
- ▽▽ - Place for attachment

TYPE LBV/290

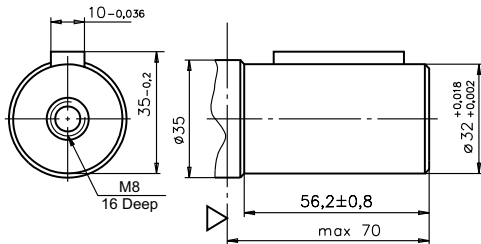


- ▽ - Place for attachment
(tightening torque for screw M10 - 8.8 DIN 912 - 5 daNm)
- ▽▽ - Place for attachment

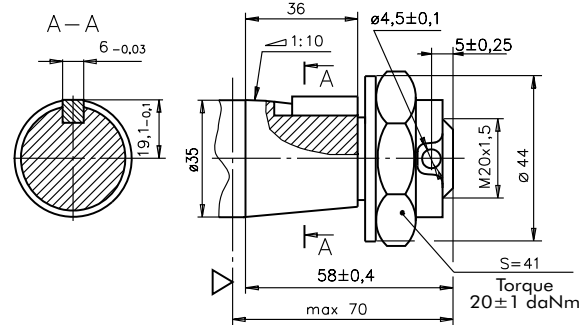
C : Brake release Port - G $\frac{1}{4}$, 9 mm depth
D, T : Drainage tap - G $\frac{1}{4}$, 9 mm depth

OUTPUT SHAFT EXTENSIONS

CB - $\varnothing 32$ straight, Parallel key A10x8x45 DIN6885
Max. Torque 77 daNm



KB - tapered 1:10, Parallel key B6x6x20 DIN6885
Max. Torque 95 daNm



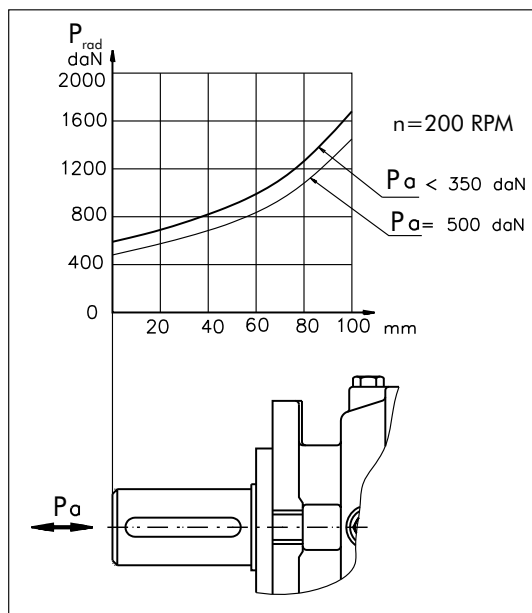
SPECIFICATION DATA

Description LBS/289(290) LBV/289(290)	21	32	43	63
*Min. Static Torque [daNm]	20-22	31-34	41-45	61-64
Opening Pressure	min	17-23		
	max	300		
Min. oil quantity for brake releasing [cm ³]	7-8			
Oil volume [cm ³]	50 - 120			
Max. Pressure in drain space [bar]	5			
Weight .../289(290) [kg]	10(11)			

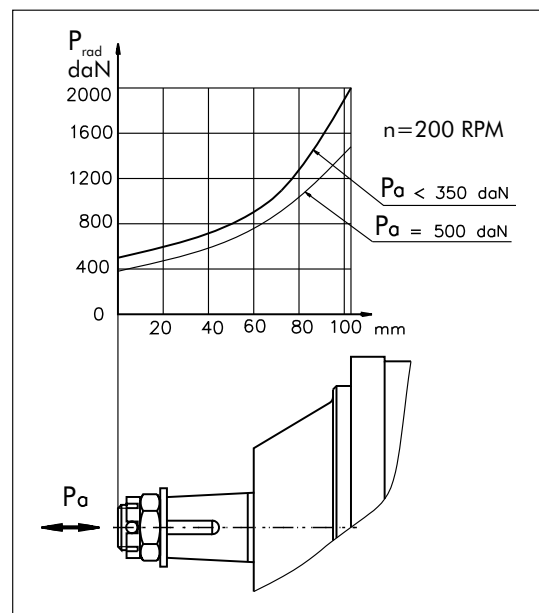
*Static torque is obtained at working pressure - 0 bar.

LOAD CURVE

LBS(V)/289



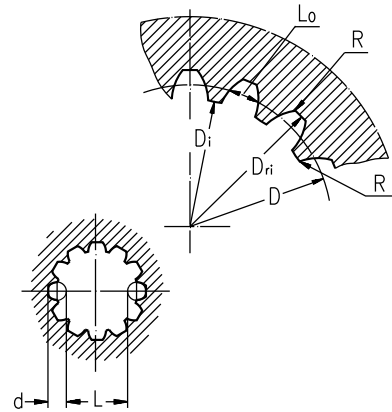
LBS(V)/290



INTERNAL SPLINE DATA FOR THE ATTACHED COMPONENT

Standard ANSI B92.1-1976, class 5
[m=2,1166]

Fillet Root Side Fit		LBS(V)/289 LBS(V)/290	LBS(V)/314 LBS(V)/315
Number of Teeth	z	12	16
Diametral Pitch	DP	12/24	12/24
Pressure Angle		30°	30°
Pitch Dia.	D [mm]	25,4	33,8656
Major Dia.	Dri [mm]	28,0 _{0,1}	38,4 ^{+0,4}
Minor Dia.	Di [mm]	23,0 ^{+0,033}	32,15 ^{+0,06}
Space Width [Circular]	Lo [mm]	4,308±0,020	4,516±0,037
Fillet Radius	R [mm]	0,2	0,5
Max. Measurement between Pin	L [mm]	17,62 ^{+0,15}	26,9 ^{+0,10}
Pin Dia.	d [mm]	4,835±0,001	4,835±0,001
Corrected	x.m [mm]	+0,8	+1,0



ORDER CODE - LB/288

1	2	3	4	5
LB/288	-			

Pos.1 - Input Shaft Hole
C, CO, SH, CB, SB

Pos.2 - Static Torque code (See Specification data)
7, 14, 21, 32, 43, 63

Pos.3 - Output Shaft Extensions*
C - ø25 straight, Parallel key A8x7x32 DIN 6885
CO - ø1" straight, Parallel key 1/4"x1/4"x1 1/4" BS46
SH - ø25,32 splined BS 2059 (SAE 6B)
SA - ø24,5 splined B25x22 DIN 5482

CB - ø32 straight, Parallel key A10x8x45 DIN 6885
KB - ø35 tapered 1:10, Parallel key B6x6x20 DIN6885

Pos.4 - Option (Paint)**
omit - no Paint
P - Painted
PC - Corrosion Protected Paint

Pos.5 - Design Series
omit - Factory specified

ORDER CODE - LBS, LBV

1	2	3	4	5	6
LB	/	-			

Pos.1 - Type
S - Disc Brake for short motor **S**- MSS
V - Disc Brake for very short motor **V**- MSV

Pos.2 - Design code
289 - for MSS and MSV Motors
290 - for MSS and MSV Motors (Wheel Mount)

Pos.3 - Static Torque code (See Specification data)
21, 32, 43, 63

Pos.4 - Output Shaft Extensions*
CB - ø32 straight, Parallel key A10x8x45 DIN 6885
KB - ø35 tapered 1:10, Parallel key B6x6x20 DIN6885

Pos.5 - Option (Paint)**
omit - no Paint
P - Painted
PC - Corrosion Protected Paint

Pos.6 - Design Series
omit - Factory specified

NOTES:

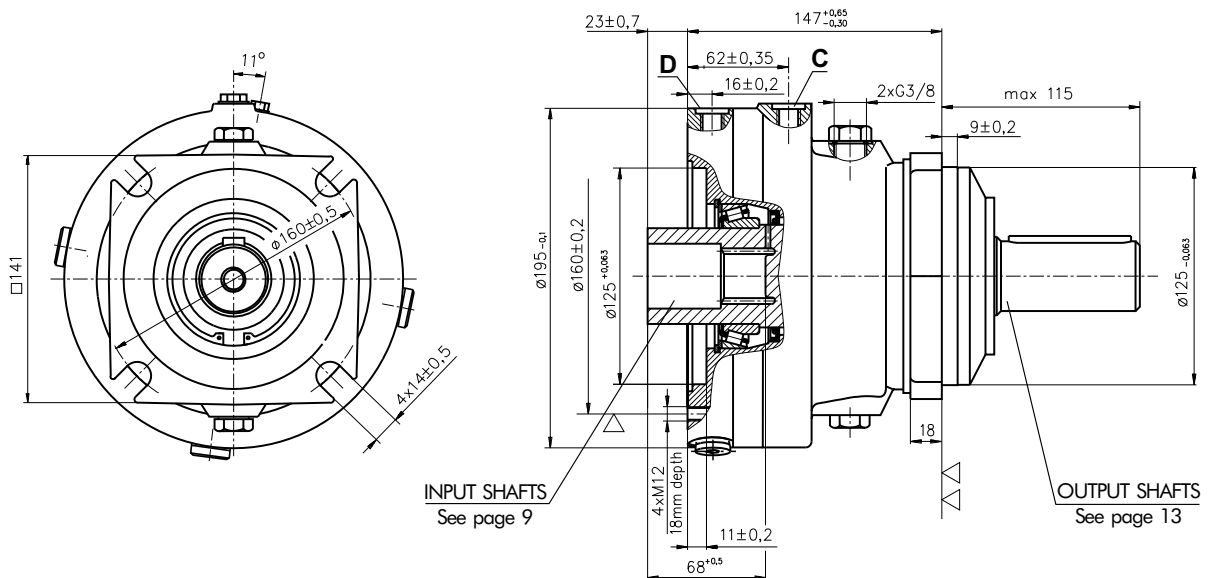
- * The permissible output torque for shafts must be not exceeded! For Max. Torque values see data on page 5 and 8.
 - ** The color is by customer's request.
- The Disc Brakes are mangano-phosphatized as standard.

ATTENTION:

1. Hydraulic brake is delivered without oil (it is lubricated only).
2. In all brakes, friction discs and separators should be lubricated. Space is filled with 50 ÷ 120 cm³ mineral oil HLP (DIN 51524) or HM (ISO 6743/4). For LB/288 fill oil after hydraulic motor assembly.

**HYDRAULIC DISC BRAKES
FOR FLANGE ATTACHMENT TO MTS AND MTV HYDRAULIC MOTORS**

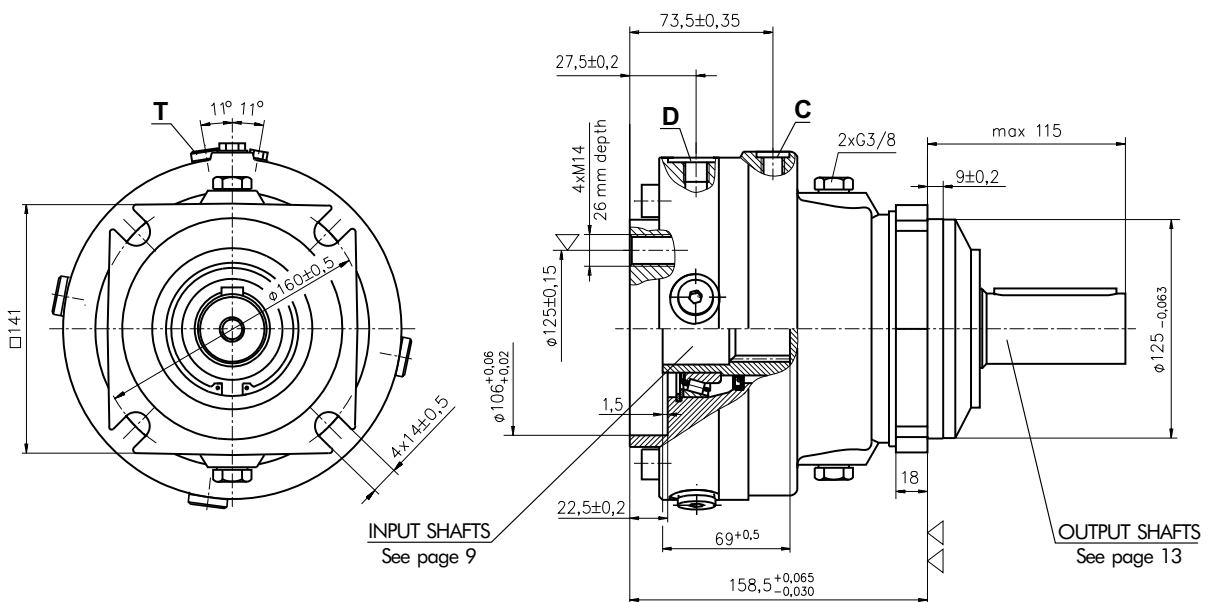
TYPE LBS/314



- ▽ - Place for attachment
(tightening torque for screw M12x30 - 8.8 DIN 912 - 7 daNm)
- ▽▽ - Place for attachment

- C : Brake release Port - G $\frac{1}{4}$, 9 mm depth
- D : Drainage tap - G $\frac{1}{4}$, 9 mm depth

TYPE LBV/314

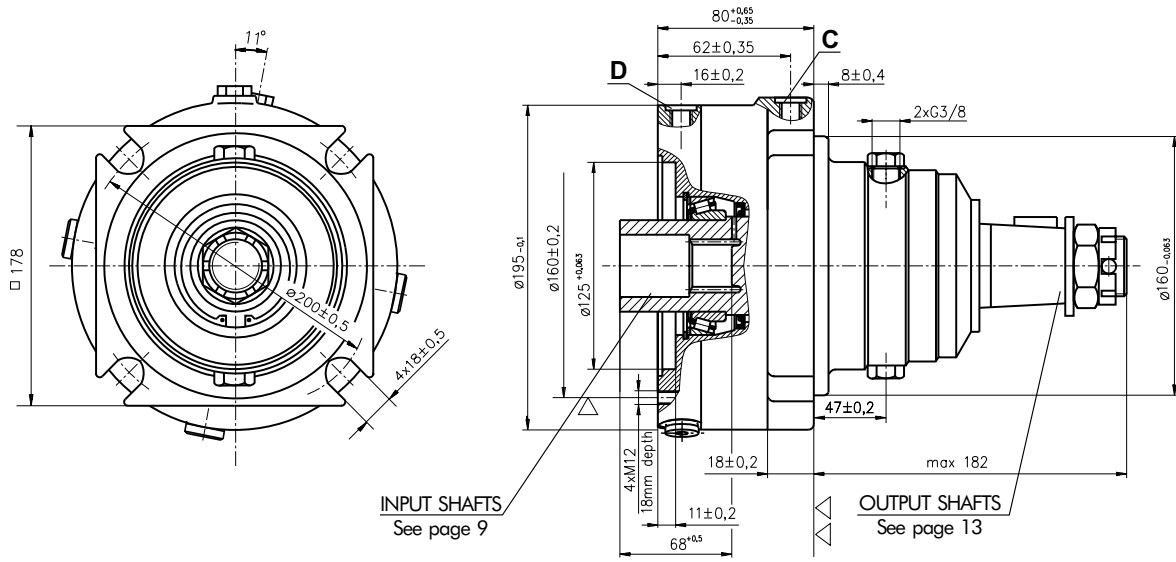


- ▽ - Place for attachment
(tightening torque for screw M14 - 8.8 DIN 912 - 11,5 daNm)
- ▽▽ - Place for attachment

- C : Brake release Port - G $\frac{1}{4}$, 9 mm depth
- D,T : Drainage tap - G $\frac{1}{4}$, 9 mm depth

**HYDRAULIC DISC BRAKES
FOR FLANGE ATTACHMENT TO MTS AND MTV HYDRAULIC MOTORS**

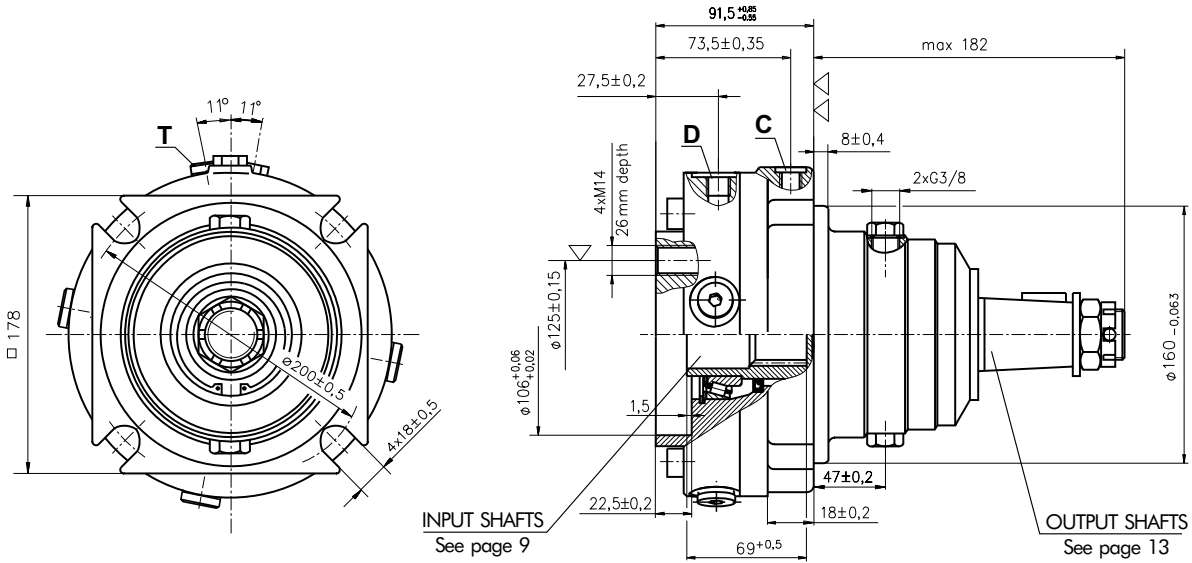
TYPE LBS/315



▽ - Place for attachment
(tightening torque for screw M12x30 - 8.8 DIN 912 - 7 daNm)
▽▽ - Place for attachment

C : Brake release Port - G $\frac{1}{4}$, 9 mm depth
D : Drainage tap - G $\frac{1}{4}$, 9 mm depth

TYPE LBV/315



▽ - Place for attachment
(tightening torque for screw M14 - 8.8 DIN 912 - 11,5 daNm)
▽▽ - Place for attachment

C : Brake release Port - G $\frac{1}{4}$, 9 mm depth
D,T : Drainage tap - G $\frac{1}{4}$, 9 mm depth

**HYDRAULIC DISC BRAKES
FOR FLANGE ATTACHMENT TO MTS AND MTV HYDRAULIC MOTORS**

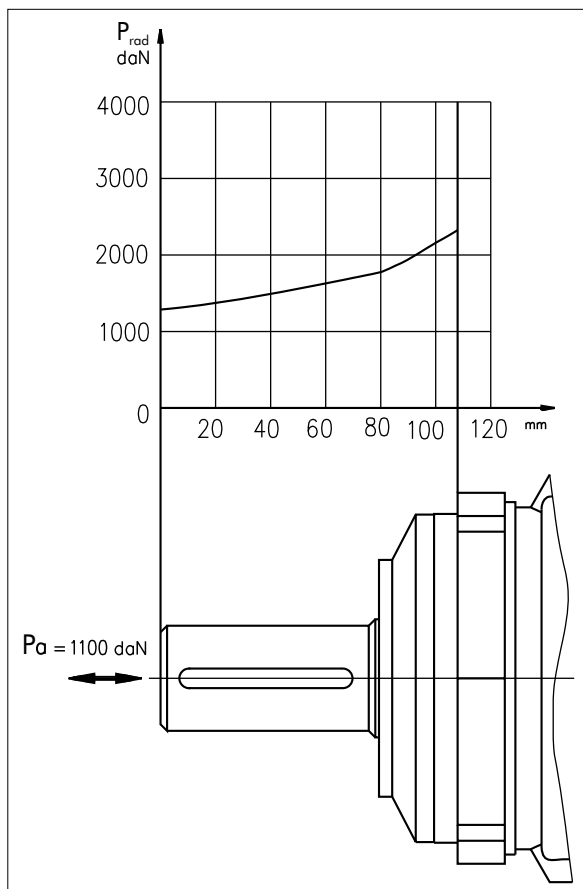
SPECIFICATION DATA

Description	LBS/314(315) LBV/314(315)	21	29	43	65	85	110	130
*Min. Static Torque [daNm]		18-23	28-33	42-46	61-70	83-92	108-118	126-136
Opening Pressure [bar]	min	4-5	6-7	9-10	13-15	18-20	23-25	27-29
	max	300						
Min. oil quantity for brake releasing [cm ³]		8-9						
Oil volume [cm ³]		150 - 300						
Max. Pressure in drain space [bar]		5						
Weight .../314(315) [kg]		24(25)						

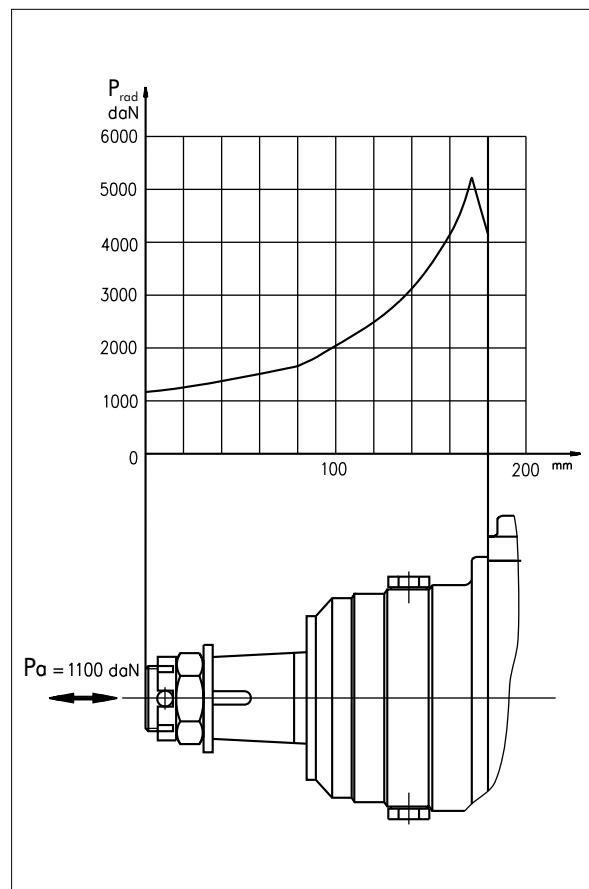
*Static torque is obtained at working pressure - 0 bar.

LOAD CURVE

LBS(V) ... /314

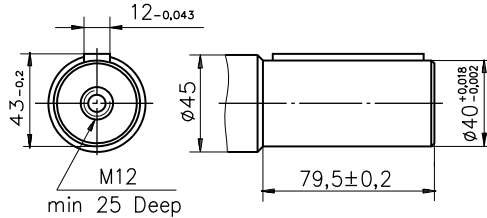


LBS(V) ... /315

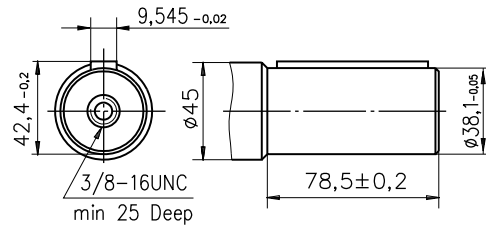


OUTPUT SHAFT EXTENSIONS

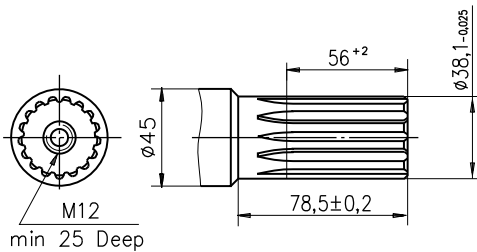
C - $\varnothing 40$ straight, Parallel key A12x8x70 DIN 6885
Max. Torque 132,8 daNm



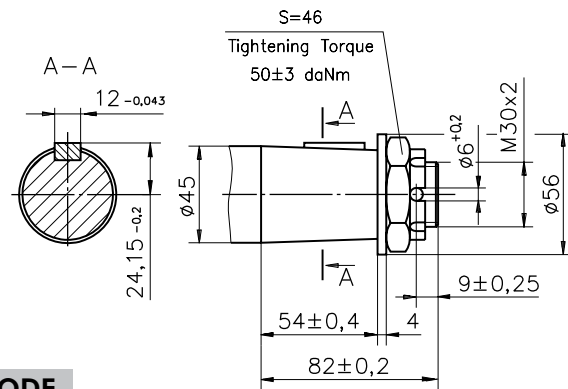
CO - $\varnothing 1\frac{1}{2}$ " straight, Parallel key $\frac{3}{8}$ "x $\frac{3}{8}$ "x $2\frac{1}{4}$ " BS46
Max. Torque 132,8 daNm



SH - $\varnothing 1\frac{1}{2}$ " splined 17T, DP12/24 ANSI B92.1-1976
Max. Torque 132,8 daNm



K - tapered 1:10, Parallel key B12x8x28 DIN 6885
Max. Torque 210,7 daNm



ORDER CODE

1	2	3	4	5	6
LB	/	-			

Pos. 1 - Type

- S** - Disc Brake for short motor **S** - MTS
- V** - Disc Brake for very short motor **V** - MTV

Pos. 2 - Design code

- 314** - for MTS and MTV Motors
- 315** - for MTS and MTV Motors (Wheel Mount)

Pos. 3 - Static Torque code (See Specification data)

21, 29, 43, 65, 85, 110, 130

Pos. 4 - Output Shaft Extensions*

- C** - $\varnothing 40$ straight, Parallel key A12x8x70 DIN 6885
- CO** - $\varnothing 1\frac{1}{2}$ " straight, Parallel key $\frac{3}{8}$ "x $\frac{3}{8}$ "x $2\frac{1}{4}$ " BS46
- SH** - $\varnothing 1\frac{1}{2}$ " splined 17T, ANSI B92.1-1976
- K** - $\varnothing 45$ tapered 1:10, Parallel key B12x8x28 DIN6885

Pos. 5 - Option (Paint)**

- omit - no Paint
- P** - Painted
- PC** - Corrosion Protected Paint

Pos. 6 - Design Series

- omit - Factory specified

NOTES:

* The permissible output torque for shafts must be not exceeded!

** The color is by customer's request.

The Disc Brakes are mangano-phosphatized as standard.

ATTENTION:

1. Hydraulic brake is delivered without oil (it is lubricated only).
2. In all brakes, friction discs and separators should be lubricated. Space is filled with 150 ÷ 300 cm³ mineral oil HLP (DIN 51524) or HM (ISO 6743/4).