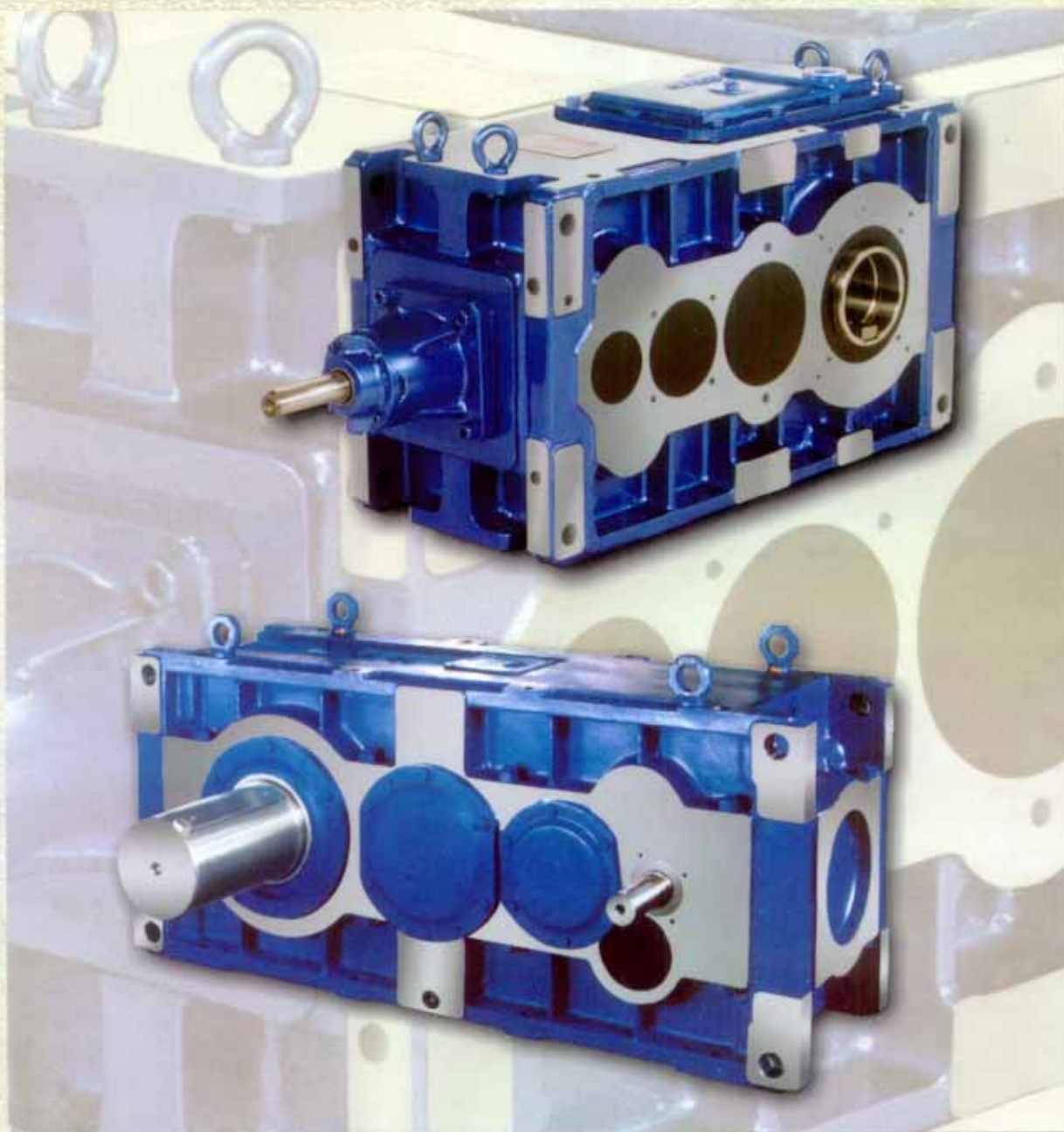


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EP - SERIES HELICAL / BEVEL HELICAL GEAR UNITS

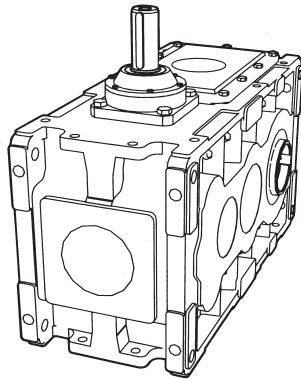
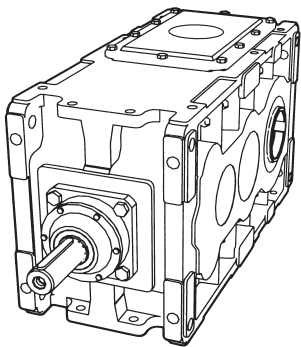
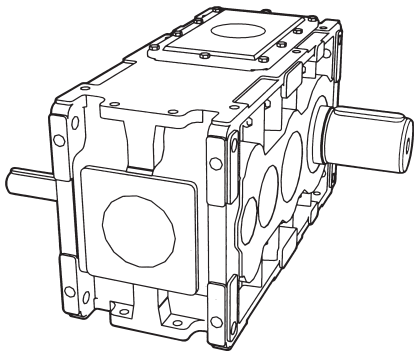
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Always a step ahead in technology

Contents	Page	
EP - Series - Alphabet	4	Position of gear case
General description	5	R1
Selection of gearbox	6/7	
Ratings		
Type Helical Gear Units	8	
PB Single stage PC 2 stage		
PD 3 stage PE 4 stage		
Dimensions		
PB-R1 PE-R1	14	
PC-S5 PE-S5	32	
PC-T6 PE-T6	38	
Ratings		
Type Bevel-Helical Gear Units	44	
PLB 2 stage		
PLC 3 stage PLD 4 stage		
Dimensions		
PLB-R1 PLD-R1	48	
PLC-S5 PLD-S5	58	
PLC-T6 PLD-T6	62	
PLC-U3 PLD-U3	66	
Ratings		
Type Compact Drive (Bevel-Helical)	74	
PWC 3 stage PWD 4 stage		
Dimensions		
PWC-R1 PWD-R1	78	
PWC-S5 PWD-S5	86	
PWC-T6 PWD-T6	90	
PWC-U4 PWD-U4	94	
Exact ratio	102	
Additional shafts	107	
Backstop	110	
Hollow shaft	112	
Motor Attachment	114	
Additional cooling	120	
Torque reaction arm	124	
Fixing holes of gear case	125	

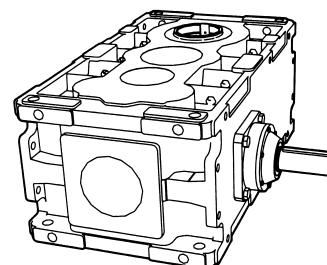
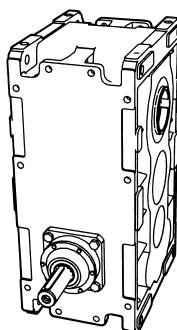
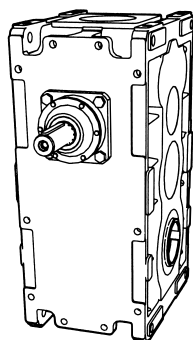
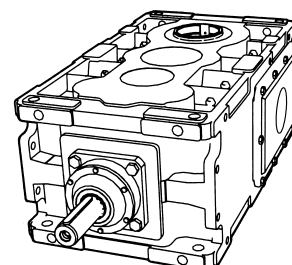
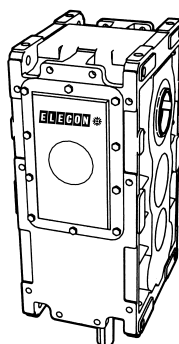
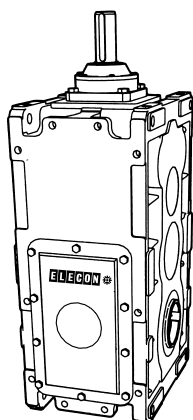
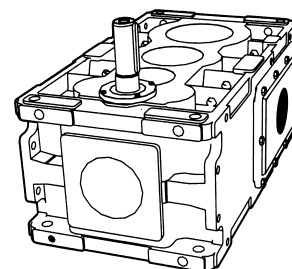
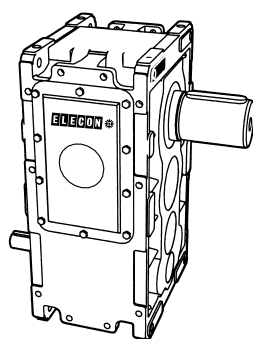
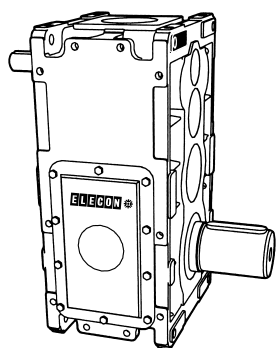


Position of gear case

....-S5

....-T6

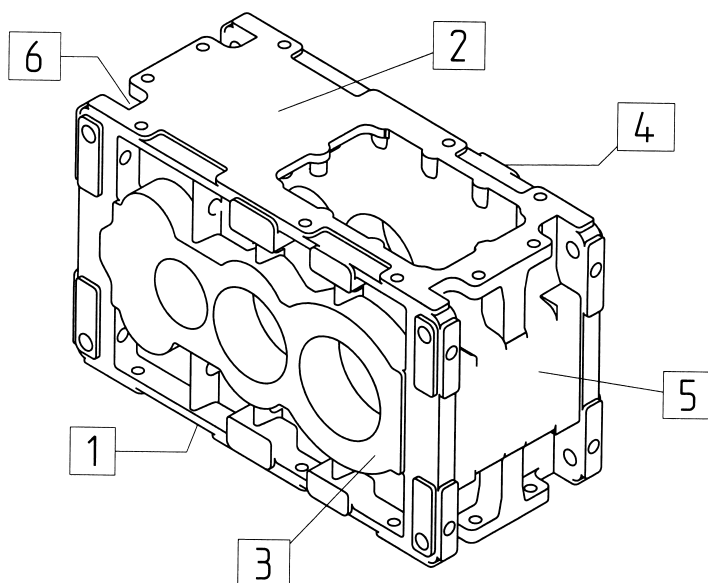
....-U3/U4



EP – Series – Alphabet

B	Helical gear unit, 1 stage
C	Helical gear unit, 2 stage
D	Helical gear unit, 3 stage
E	Helical gear unit, 4 stage
F	Flange shaft (output)
G	Hollow shaft with shrink disc
H	Hollow shaft with key-way
J	Motor bracket, base plate
K	Motor bell housing
L	Bevel pinion shaft on centre line of output shaft
M	Adjustable motor base
P	Gear case, sizes 10...31 one-piece Sizes 3567 : Gear Case - split
R1	Position of gear case - horizontal, mounting Surface 1 downward
S5	Gear case vertical mounting with horizontal shafts, mounting surface 5 downward, high speed shaft upward
T6	Gear case vertical mounted with horizontal shafts, mounting surface 6 downward, high speed shaft downward
U3	Position of gear case and output shaft - vertical mounting surface 3 downward
U4	Position of gear case and output shaft - vertical, mounting surface 4 downward
V	Solid output shaft
W	Bevel pinion shaft, right angle to output shaft
Z	Additional cooling

Designation of mounting surfaces of gear case (1....6), permissible position see dimension sheets.



Helical Gears / Bevel Helical Gears

EP - Series

Is a totally newly developed gear program

in acc. with the latest technology

- The ELECON quality assurance system for design, development, production, assembly, after-sales service in acc. with **DIN ISO 9001 (EN 29001)** registration no. 041004756 TUV CERT guarantees a uniformly high standard.

EP - Series

Is an intelligent gear concept

- because it answers the purpose with fewer but more versatile parts (high degree of standardisation and the use of common parts size to size gives optimum availability and short delivery times)
- because the sizes encompass smaller ranges and also the permissible torque with increasing size are in smaller bands
- because it offers more advantages owing to
 - faster delivery times
 - more variable and universal possible applications and
 - greater standardisation of the series (mass production from a construction kit)

Construction Types

- 1 to 4 stage helical gears
- 2 to 4 stage bevel helical gears
- 19 sizes follow, the modular concept

Construction and Structural Shapes

- for horizontal, vertical and standing design
- spiral bevel spur gears as compact drives
- with motor bell housing
- with back stop
- with auxil. drive with overriding clutch
- with flange for output side additions such as stirrer bell housing

Output Torques

T2: up to 480,000 Nm

Ratios

- $i_N = 1.25 \dots 710$,
- $i_N > 710$ through a combination of EP - Series gears or a combination of EP - Series with other gears

Gears

- Helical gears for reduced noise, case hardened (in our own hardening bay) and ground
- Profile corrections for optimum inertia quality
- Spiral bevel gears (cyclo-paloid tooth form) hardened and lapped or ground
- Calculation checks possible in accordance with DIN 3990, AGMA and classification Company standards

Casing

- One piece casing for sizes 14 to 31
One piece casing = great rigidity, minimum volume, high thrust loads possible as there are no parting lines
- Built-in space for large roller bearings
- Easy to assemble and take apart
- Design in accordance with the latest trends in accoustics

Material: grey cast iron casting,

- Nodular cast iron and welded casing on request
- split casing from size 35 onward.

Shafts

Available as standard **on the output shaft:**

- Solid shaft
- Solid through shaft
- Hollow shaft with feather key
- Hollow shaft with shrink disc

Available as standard **on the input shaft:**

- Shaft with 1 and 2 shaft ends (on helical gears)
- Type PLD (Bevel helical gears) with 1 to 3 drive shafts

Couplings

On the output shaft suitable for standard output shafts and gear torques:

- Flexible couplings
- Gear coupling
- Other coupling types on request

on the input shaft suitable for standard drive shafts and gear torques :

- Flexible couplings
- Gear coupling
- Fluid coupling
- Other coupling types on request

Motors

Suitable motors of renowned make from the ELECON-EP-Series catalogue program, refer page No. 114 to 119.

Roller Bearings

Long life roller bearings

Seals

Standard seal systems available for input and output shafts:

- Radial shaft sealing rings in various materials
- Radial shaft sealing rings with additional dust lip

- second radial shaft seal with intermediate grease-filled chamber
- greased labyrinth seals (with radial shaft sealing ring)
- non-contact seal

Maintenance cover with reusable seal

Lubrication

- Gear wheels and roller bearings are splash lubricated as standard
- Standardized injection lubrication systems with shaft or motordriven pump are available as options
- Oil dipstick as standard for horizontal gears, otherwise oil sightglass

Cooling

Additional cooling devices available as standard:

- mechanical air cooling
- cooling coil
- external oil cooler (oil/air cooler and oil/water cooler)

Torque Arms

available on request

Motor consoles

available as standard

Back Stops

available as standard

Accessories

- Heating element
- Operational monitoring systems (among others for speed and torque)
- Diagnostic systems

General information

- Information sheets available as CAD files for various computer systems and interfaces
- Computer programs for drive selection

Delivery - Putting into Operation

Delivery without oil, oil type and quantity according to rating plate.

Standard conservation with normal transport conditions sufficient for a period of 6 months.

Setting up and putting into operation in accordance with instruction manual.

The protection from contact with moving parts required by law is not included in the supply. (Exception : hollow shaft gears are delivered with protective cover for the shrink disc).

Gear Unit application factors

Gear unit application factors are in line with DIN standard no. 3990 part 11 (edition 2/89) and are based on our experience for normal operating conditions. Changes in the necessary drive selection may take place after stating the exact operating conditions.

Table 1 : Gear unit application factor f_k 1)	Intermitt. Use (0.5 h)	Shifts 2)
Blowers, Ventilator		
Air Cooler		1.4...1.5
Axial blowers	0.8	1.0...1.25
Cooling tower fans		1.6...1.7
Heat exchangers		1.5
Rotary piston blowers	1	1.25...1.5
Suction draught blower	1	1.25...1.5
Turbo exhausters	0.8	1.0...1.25
Cableways		
Continuous ropeways		1.4...1.6
Freight ways		1.3...1.4
Shuttle cableways		1.4...1.8
T-bar lifts		1.3...1.4
Cement Industry		
Concrete mixers		1.5
Crushers		1.2...1.4
Roller mills		2
Rotary kilns		2
Separators		1.6
Tube mills		1.8
Chemical Industry		
Agitators for materials		
with constant density	1	1.3...1.5
with variable density	1.2	1.4...1.6
Agitators with variable gas absorbt.	1.4	1.6...1.8
Centrifuges	1	1.25...1.35
Drying kilns		1.5
Kneading machines		2
Toasters	1	1.3...1.5
Compressors		
Piston compressors		1.8...1.9
Rotary compressors		1.4...1.5
Turbo compressors	1	1.25...1.5
Conveyors		
Apron Conveyors		1.2...1.5
Band elevators	1	1.25...1.5
Belt conveyors	1.0...1.1	1.2...1.4
Bucket conveyors		1.2...1.5
Canvas belt elevators	1	1.25...1.5
Cellular bucket belt conveyors	1	1.25...1.5
Chain bucket elevators	1	1.25...1.5
Circular conveyors	1	1.25...1.5
Escalators	1	1.2...1.4
Goods lifts		1.2...1.5
Hoisting engines		1.5...1.8
passenger lifts		1.5...1.8
Rail travelling devices		1.5
Scraper chain conveyors	1	1.25...1.5
Screw conveyors	1	1.25...1.5
Sinking mine machines	1.5	1.75...2.0
Steel belt conveyors	1	1.25...1.5
Winders	1.4	1.6
Cranes Classified acc. to FEM 1001		
Crushers		
Ball crushers		1.75...2.0
Hammer mills		1.75...2.0
Rebound crushers		1.75...2.0
Rod mills		1.75...2.0
Roller mills		2
Swinging crushers		1.75...2.0
Tube mills		1.8
Dredgers		
Bucket chain drives		1.75...1.85
Bucket wheels		1.75...2.2
Cutter heads		2.2
Dumping devices		1.3...1.5
Manoeuvring winches	1	1.25...1.5
Slewing gears		1.4...1.8
Sucking pumps	1	1.25...1.5
Travelling gears (caterpillar)	1.2	1.6...1.8
Travelling gears (rails)	1	1.25...1.5

Table 1 : Gear unit application factor f_k 1)	Intermitt. Use (0.5 h)	Shifts 2)
Food Industry Machinery		
Beet sugar production		
-Beet washing machines & cutters		1.5
-Slicing machines		1.2
-Juice boilers & refrigerators		1.4
Bottling & container filling machines	0.8	1.25...1.5
Flour bucket elevators	0.8	1.0...1.25
Kneading machines	1	1.25...1.5
Mash tubs	1	1.25...1.5
Packaging machines	0.8	1.0...1.25
Sugar cane crushers		1.25...1.5
Sugar cane knives (3)		1.7
Sugar cane mills (3)		1.7
Generators, Converters (3)		
Frequency converters		1.8...2.0
Generators	0.8	1.0...1.25
Welding generators	1.5	1.75...2.0
Metal Working Machines		
Crank Presses		1.75...2.0
Forging presses		1.75...2.0
Hammers		1.75...2.0
Plate bending machines		1.25...1.5
Plate straightening presses		1.75...2.0
Roller levellers		1.6
Stamping presses		1.75...2.0
Metallurgical Industry		
Blast furnace blowers		1.25...1.5
Converters		1.75...2.0
Inclined furnace hoists		1.75...2.0
Mining, Stone and Clay Working Machines		
Conical crushers		2
Endless chain transporters		1.5
Jaw breakers		2
Jolters		1.5
Mine ventilating fans		1.5
Rolling crushers		1.5
Rotary crushers		2
Rotary kilns		2
Separators		1.5
Toothed roll crusher		2
Tub-pushing devices		1.5
Oil Industry		
Charging filter pumps		1.25...1.5
Flush boring pumps		1.25...1.5
Pipeline pumps		1.25...1.5
Rotary drilling equipment	1.5	1.75...2.0
Paper machines for all types		
Presses 3)		1.0...1.1
pumps		
Centrifugal pumps	1	1.2...1.3
Charge pumps	1.5	1.75...2.0
Piston pumps	1.2...1.3	1.4...1.8
Plunger pumps		2
Sludgers	1	1.25...1.5
Rolling Mills		
Belt winders	1	1.25...1.5
Billet shears		2
Blooming and slabbing mills		2
Capstan wheels		1.5
Chain transfer		1.5
Cold band rolling mills 3)		1.75...1.85
Cooling bed transfer frames		1.5
Continuous casting drivers 3)		1.4
Continuous shears 3)		1.5
Crank type shears	1	1
Cropping shears		2
De-scaling breakers		2
Drawing bench drives		2
High speed roller tables		1.5
Ingot conveyors		2
Ingot pushers		1.2
Looper		1.5
Loop lifter		1.5
Low speed roller tables		1.5
Plate rolling trains		2
Plate shears		2
Plate tilters	1	1.0...1.2
Plate trimming shears		1.5

Table 1 : Gear unit application factor f_k 1)	Intermitt. Use (0.5 h)	Shifts 2)
Reversing blooming mills		2.5
Reversing plate mills		1.8
Reversing sheet mills		2
Reversing Slabbing mills		2.5
Reversing wire mills		1.8
Rod reel & belt winders		1.5
Roll adjustment devices		1.5
Roll weighting drives		0.91
Roller straighteners		1.6
Roller tables continuous		1.5
Roller tables intermittent		2
Sintering belt drives		1.5
Straightening & transp. equipment		1.5
Thin sheet rolling trains		2
Transfer skids		1.5
Tube reverse equipment		1.8
Turntables (Contin. casting)		1.5
Walking beam conveyors		2
Winders		1.6
Working roller tables		2
Rubber and plastic Industry Machinery		
Calenders		1.5
Extruders		1.5
Kneading machines		1.8
Mixers	1.0...1.4	1.3...1.7
Rolling mills		2
Rotary Cooler		1.3...1.4
Textile Machines		
Calender	1	1.25...1.5
Looms	1	1.25...1.5
Printing and dyeing machines	1	1.25...1.5
Take-up rollers	1	1.25...1.5
Willows	1	1.25...1.5
Water Treatment		
Circular and longitudinal rakes	1	1.3...1.5
Filter Presses	1	1.3...1.5
Flocculation agitators	0.8	1.0...1.3
Pre-thickeners		1.1...1.3
Raking equipment	1	1.2...1.3
Rotary aerators		1.5...1.7
Screw pumps		1.3...1.4
Thickeners		1.2
Water wheels		2
Wood Working Machines		
Barkers	1.5	1.75...2.0
Planing machines	1	1.25...1.5
Saw frames	1.5	1.75...2.0

Table 2 : Operating Frequency factor f_e					
2	1.6	1.4	1.2	1.1	1
With...load peaks per hour					
1	2-10	11-20	21-50	51-100	>100

Table 3 : Reversal factor f_r		
1.0	0.85	0.7
Steady direction of load	Alternating direction of load	Reversing operations

1) Application factors apply to the following driving motors : electric motors, turbines and fluid power motors. When combustion engines are the driving force, enquiries have to be made.

2) The lower table value is for single shift operation and for lighter applications, the upper table value is for continuous use and heavier applications.

3) Design is in accordance with maximum torque.

Gear Unit Selection

- Establish the type of gear unit and mounting arrangement - Ratio $i_{\text{sol}} = \frac{n_1}{n_2}$ - Selection of the appropriate nominal ratio i_N (for the actual ratio i_w page 106 and follow.) - Determine the gear unit size. Check the gear unit power $P_N \geq P_e \cdot f_k$ f_k = Gear unit application factor, see table 1 (page 6) Cheking the peak torque $T_{\text{max}} \leq 9550 \frac{P_N}{n} \cdot f_E \cdot f_R$ f_E = Operating frequency factor, see table 2 (page 6) f_R = Reversal, factor, table 3 (page 6) - Determination of the type of cooling $P_t \geq P_e$ $P_t = P_{t-} \cdot f_w \cdot f_A$	n_1 [min ⁻¹] Input speed n_2 [min ⁻¹] Output speed i_{sol} Desired ratio i_N Nominal ratio i_w Actual ratio P_M [kW] Motor power P_N [kW] Nominal power output P_e [kW] Effective power of machine to be driven f_k Gear unit application factor f_E Operating frequency factor f_R Reversal factor T_{max} [Nm] Start-up or maximum motor or braking torque	P_t [kW] Thermal capacity P_{t0} [kW] Thermal capacity for drive without additional cooling P_{t1} [kW] Thermal capacity with air cooling P_{t3} [kW] Thermal capacity with cooling coil P_{t4} [kW] Thermal capacity with air cooling and cooling coil f_w Thermal factor f_A Load factor ϑ_U [°C] Ambient temperature ED [%] Duty cycle per hour
--	---	--

The shaft ends are provided with shearing-loadfree couplings for torque transmission. Ask for explanations for external forces.

Design Example

Machine to be driven : Belt conveyor for freight loading
 Required output power : $P_e = 44$ kW
 Speed : $n_2 = 28$ min⁻¹
 Duty cycle : $ED = 100$ %
 Starts per hour : 10
 Daily operating time : 24 hours/day
 Ambient temperature : $\vartheta_U = 30$ °C

Installation in the open air, constant strong blast given.

Driving Machine :

Three - phase motor
 Motor output : $P_M = 55$ kW
 Motor speed : $n_1 = 1500$ min⁻¹
 Max. motor torque : $T_{\text{max}} = 560$ Nm (pull-out torque)

Selection

1. A bevel helical gear unit for horizontal installation in a hollow shaft version with shrink disc is required.

2. Ratio :
 $i = n_1 / n_2 = 1500 / 28 = 53.6$
 Nominal ratio : $i_n = 56$

The power data page 49 comes up with type **PLC**.

3. Checking the gear nominal output :

Required Nominal output

$$P_N \geq P_e \cdot f_k$$

with application factor f_k from table 1 :

$f_k = 1.4$ (upper value for continuous use)

$$P_{N \text{ required}} \geq 44 \times 1.4 = 61.6 \text{ kW}$$

Selected : Gear unit **PLC25** with $R_N = 64$ kW
 4. Checking the peak torque :

$$T_{\text{max}} \leq 9550 \frac{P_N}{n} \cdot f_E \cdot f_R$$

With operating frequency factor f_E from table 2 : $f_E = 1.6$

With reversal factor f_R from table 3 : $f_R = 1.0$

$$T_{\text{max}} \leq 9550 \cdot \frac{64}{1500} \cdot 1.6 \cdot 1.0 = 652 \text{ Nm} \quad 560 \text{ Nm} < 652 \text{ Nm O.K.}$$

5. Checking the thermal capacity :

$$P_e \leq P_t \text{ with } P_t = P_{t-} \cdot f_A \cdot f_w$$

P_{t-} : P_{t0} Thermal capacity without additional cooling

P_{t1} Thermal capacity with ventilator

P_{t3} Thermal capacity with cooling coil

P_{t4} Thermal capacity with ventilator and cooling coil
 $\frac{P_e}{P_N} = \frac{44}{64} \cdot 100\% = 69\%$

With a duty cycle factor f_A from table 5 : $f_A = 0.96$ for $\vartheta_U = 30$ °C and $ED = 100\%$

With thermal factor f_w from table 4 : $f_w = 0.86$ for $\vartheta_U = 30$ °C and $ED = 100\%$

Gear units without additional cooling : $P_t = 83 \cdot 0.96 \cdot 0.86 = 69$ kW

With $P_{t0} = 83$ kW from page 50

$$P_e = 44 \text{ kW} < P_t = 69 \text{ kW}$$

No additional cooling is necessary

Order code :

PLC	25	–	R1	1	–	G	12	–	56
-----	----	---	----	---	---	---	----	---	----

Power ratings

Type				Gearbox Size							
PB				10	12	16	20	25	31	40	45
Helical Gear Units, single stage	iN	n ₁	n ₂	Nominal Power							
		[min ⁻¹]		P _N [KW]							
	1.25	1500	1200	120	320	660	1450	2800	4100		
		1000	800	80	210	440	970	1850	2750		
	1.4	1500	1070	110	300	620	1350	2600	3800		
		1000	715	73	200	410	900	1700	2500		
	1.6	1500	940	105	280	570	1260	2400	3600		
		1000	625	70	190	380	840	1600	2400		
	1.8	1500	835	96	260	530	1160	2200	3350		
		1000	555	64	170	350	770	1450	2250		
	2	1500	750	89	220	460	1000	2200	3100		
		1000	500	59	145	310	670	1450	2000		
	2.24	1500	670	80	200	420	920	2000	2800		
		1000	445	53	130	280	610	1350	1850		
	2.5	1500	600	80	200	420	920	1850	2800		
		1000	400	53	130	280	610	1250	1850		
Helical Gear Units, two-stage	4	1500	375	47	130	270	520	850	1500	2700	4700
		1000	250	31	85	180	350	570	1000	1800	3100
	4.5	1500	335	43	110	230	460	770	1400	2300	4200
		1000	220	29	73	150	310	510	950	1550	2800
	5	1500	300	34	88	180	360	640	1200	2000	3200
		1000	200	23	59	120	240	420	800	1350	2100
	5.6	1500	270	32	82	170	320	590	1000	1800	3000
		1000	180	21	55	110	210	390	650	1200	2000

Type				Gear box Size																		
PC				14	16	18	20	22	25	28	31	35	40	42	45	47	50	53	56	60	63	67
Helical Gear Units, two-stage	iN	n ₁	n ₂	Nominal Power P _N [KW]																		
		[min ⁻¹]																				
	4	1500 1000	375 250	121 81		230 153		542 360		840 560		1800 1200		2500 1670								
	4.5	1500 1000	335 220	108 72		230 153		500 360		840 560		1750 1170		2500 1670								
	5	1500 1000	300 200	98 65		230 153		460 350		770 513		1600 1070	1800 1200	2500 1670	2500 1670							
	5.6	1500 1000	270 180	91 58		230 153	230 153	430 310	540 360	710 473	840 560	1500 1000	1750 1170	2500 1670	2500 1670							
	6.3	1500 1000	240 160	81 52	115 85	211 141	230 153	400 270	500 360	661 441	840 560	1430 955	1600 1070	2300 1535	2500 1660	2500 1660						
	7.1	1500 1000	211 141	72 46	112 75	196 131	230 153	367 245	460 350	600 400	770 513	1260 840	1500 1000	2230 1490	2500 1670	2500 1670						
	8	1500 1000	188 125	64 41	106 71	174 116	232 155	330 220	410 310	570 380	711 474	1120 746	1490 990	1985 1325	2300 1530	2500 1660						
	9	1500 1000	167 111	57 36	94 63	155 103	206 137	294 196	374 249	538 358	660 440	995 663	1320 880	1763 1175	2200 1470	2500 1665						
	10	1500 1000	150 100	51 33	85 57	139 93	185 123	264 176	358 239	483 322	600 400	895 600	1200 800	1590 1058	1980 1320	2300 1530						
	11.2	1500 1000	134 89	46 29	76 51	124 83	165 110	236 157	326 217	452 301	589 391	800 533	1070 710	1420 945	1770 1180	2175 1450						
	12.5	1500 1000	120 80	41 26	68 45	111 74	148 99	211 141	304 203	426 284	527 351	745 500	955 640	1320 880	1585 1055	1950 1300	2435 1625					
	14	1500 1000	107 71	37 23	61 41	94 63	132 88	189 126	276 184	373 249	470 312	680 452	853 570	1180 786	1415 945	1740 1160	2175 1450	2685 1790				
	16	1500 1000	94 63	30 20	53 35	81 54	116 77	160 110	242 161	314 209	427 285	560 370	775 520	1020 680	1290 860	1520 1015	1905 1270	2350 1565				
	18	1500 1000	83 56	28 18	47 31	71 48	103 69	145 96	215 143	280 187	392 261	500 330	690 460	878 590	1170 780	1355 900	1690 1130	2050 1365	2590 1730			
	20	1500 1000	75 50		42 28		93 62		183 122		364 243		596 398		1010 675	1270 845		1825 1220	2330 1555			
	22.4	1500 1000	67 44.5		38 25		82 55		160 105		306 204		533 355		884 587	1150 770			2000 1335			
	25	1500 1000	60 40		32 21		74 49		143 95		269 179					1005 670			1780 1185			
	28	1500 1000	54 35.5		29 19											875 575						

Power ratings

Type				Gearbox Size																					
PD				14	16	18	20	22	25	28	31	35	40	42	45	47	50	53	56	60	63	67			
Helical Gear Units, three-stage	i _N	n ₁ [min ⁻¹]	n ₂	Nominal Power																		P _N [KW]			
	16	1500 1000	94 63			87 58				300 200		582 388		1031 687			1900 1270			3370 2250					
	18	1500 1000	83 56			73 49				267 178		527 351		917 611			1690 1127			3000 2000	3630 2420				
	20	1500 1000	75 50	26 17		64 43		132 88		252 168		447 298	621 414	817 545	1029 686		1522 1015	1880 1253		2700 1800	3270 2180	3800 2530			
	22.4	1500 1000	67 44.5	23 15.2		62 41	83 55	118 79		238 159	294 195	416 277	554 369	737 491	937 625		1360 906	1680 1120	2080 1387	2410 1605	2805 1870	3390 2260			
	25	1500 1000	60 40	19.5 13		53 35	74 49	103 69	155 103	213 142	264 176	380 253	477 318	660 440	808 539	1013 675	1220 812	1474 983	1865 1243	2160 1440	2614 1743	2890 1930			
	28	1500 1000	54 35.5	18 12		46 29	66 39	93 62	130 87	180 120	256 171	322 209	443 295	584 389	735 490	922 615	1090 725	1342 895	1600 1070	1930 1285	2334 1556	2710 1807			
	31.5	1500 1000	47.5 31.5	16 11	27 18	41 27	59 39	84 56	113 75	160 107	235 157	284 189	394 263	502 333	666 444	796 531	966 644	1193 795	1480 987	1700 1130	1995 1330	2410 1606			
	35.5	1500 1000	42.5 28	14 9.3	24 16	37 25	52 35	74 49	101 67	150 100	208 139	267 178	338 223	465 310	569 379	713 475	858 572	1040 692	1313 875	1520 1013	1780 1172	2035 1360			
	40	1500 1000	37.5 25	12.2 8.1	20 13.3	32 21	46 31	65 43	97 65	126 84	172 115	224 149	300 200	409 273	495 330	645 430	761 507	912 608	1120 748	1350 900	1634 1090	1800 1200			
	45	1500 1000	33.5 22.2	11 7.3	18 12	29 19	41 27	58 39	81 54	112 75	150 100	200 133	276 184	354 235	466 311	557 371	677 451	835 557	987 658	1190 791	1400 931	1690 1124			
	50	1500 1000	30 20	10 6.7	17 11	28 19	37 25	53 35	71 47	106 71	148 99	186 124	234 156	330 220	404 269	487 324	609 406	737 491	932 621	1080 720	1256 837	1445 963			
	56	1500 1000	27 17.9	9.1 6.1	15 10	23 15	32 21	47 31	64 43	95 63	123 82	169 113	215 142	295 197	356 236	461 307	544 363	652 435	800 534	963 642	1170 778	1300 862			
	63	1500 1000	23.8 16	7.7 5.2	12.7 8.5	20 13	29 19	41 27	61 41	80 53	107 71	142 95	197 131	259 173	327 218	398 265	483 322	596 397	705 470	856 571	1040 691	1200 803			
	71	1500 1000	21 14	7.0 4.7	11 7.3	18 12	26 17	37 24	51 34	71 47	104 69	126 84	175 117	222 148	295 197	340 227	429 286	529 353	657 438	752 501	885 590	1070 713			
	80	1500 1000	18.8 12.5		11 7.3	16 11	23 15		45 30	60 40	92 61	119 79	149 99	206 137	252 168	317 211	381 254	461 307	583 389	674 449	787 523	903 602			
	90	1500 1000	16.7 11.1		9.4 6.3	14.3 9.5	21 13		40 27	56 37	76 51	99 66	133 89	182 121	220 146	284 191	338 225	405 270	498 332	600 400	726 484	804 534			
	100	1500 1000	15 10		7.7 5.1	12.9 8.6	18 12			50 33	67 45	90 60	124 83	158 105	210 140	251 167	304 203	376 251	444 296	534 356	628 419	759 506			
	112	1500 1000	13.4 8.9		7.2 4.8		17 11				59 39		106 71		180 120	217 144		329 219	416 277		561 372	645 430			
	125	1500 1000	12 8				15 9.9				55 37		96 64		158 105	206 137		292 195	359 239		578 385				
	140	1500 1000	10.7 7.1				13 8.8				48 32					179 119			317 211						
	160	1500 1000	9.4 6.3													152 102									

PE			14	16	18	20	22	25	28	31	35	40	42	45	47	50	53	56	60	63	67
Helical Gear Units, four-stage	71	1500 1000	21 14				37 25		68 45		131 87		232 155			429 286			760 507		
	80	1500 1000	18.8 12.5				33 22		65 43		119 79		206 137			381 254			674 450	817 545	
	90	1500 1000	16.7 11.1		15 10		29 19	43 29	56 37		100 66		182 121	229 153		338 225	417 278		600 400	726 484	
	100	1500 1000	15 10		13 8.7		26 17	37 25	48 32		93 62	124 83	165 110	210 140		304 203	376 251	466 311	540 360	630 420	759 506
	112	1500 1000	13.4 8.9		11.5 7.6		24 16	32 21	47 31	63 42	85 57	111 74	147 98	180 120	226 151	272 181	329 219	416 277	482 321	583 389	645 430
	125	1500 1000	12 8		10.3 6.6	15 10	21 14	31 21	40 27	55 37	72 48	96 64	131 87	165 110	206 137	244 163	301 201	359 239	432 288	523 349	607 405
	140	1500 1000	10.7 7.1		9.9 6.6	13 8.7	19 13	26 17	36 24	47 31	64 43	89 59	113 75	150 100	179 119	217 145	268 179	333 222	384 256	450 300	542 361
	160	1500 1000	9.4 6.3		8.2 5.5	11.6 7.8	17 11	22 15	33 22	44 29	59 39	78 52	103 69	126 84	158 105	190 127	230 155	291 191	337 225	394 264	452 301
	180	1500 1000	8.33 5.55		7.1 4.7	10.3 6.8	14 9.6	20 13	28 19	38 25	50 33	66 44	91 61	110 73	143 95	169 113	203 136	249 166	300 200	363 242	400 270
	200	1500 1000	7.5 5		6.4 4.3	9.3 6.2	13 8.7	18 12	25 17	34 23	45 30	60 40	79 53	105 70	125 83	152 101	188 125	222 148	269 182	314 210	379 253
	224	1500 1000	6.7 4.46		6.2 4.1	8.3 5.5	12 8.0	16 11	22 14	32 21	42 28	55 37	74 49	90 60	109 72	136 91	166 110	208 139	241 161	280 185	323 215
	250	1500 1000	6 4		5.3 3.5	7.4 4.9	11 7.3	14 9.3	21 14	27 18	38 25	48 32	66 44	79 53	103 69	122 81	146 98	179 119	216 144	261 174	290 195
	280	1500 1000	5.36 3.57		5.1 3.0	6.6 4.4	9.3 6.2	14 9.3	18 12	24 16	32 21	43 28	58 39	74 49	90 60	109 73	134 89	159 106	193 129	233 155	271 181
	315	1500 1000	4.76 3.17		4.1 2.7	5.9 3.9	8.2 5.5	11 8.0	16 11	21 14	28 19	39 26	50 34	67 45	77 51	97 65	119 79	148 99	171 114	200 133	241 161
	355	1500 1000	4.22 2.82			5.2 3.5	7.5 5.0	10 6.7	15 10	20 13	27 18	35 23	46 31	57 38	71 47	86 57	104 69	131 87	152 101	177 121	204 136
	400	1500 1000	3.75 2.5			4.6 3.1	6.5 4.3	9.0 6.0	13 8.7	17 11	22 15	30 20	41 27	49 33	65 43	76 51	91 61	112 75	135 90	163 109	180 120
	450	1500 1000	3.35 2.22			4.1 2.7	5.8 3.9	8.1 5.4	11 7.3	15 10	20 13	27 18	35 23	47 31	56 37	68 45	83 55	99 66	120 80	140 93	169 113
	500	1500 1000	3 2					7.2 4.8			14 9.3	25 17		40 27	49 32		74 49	93 62		125 84	145 97
	560	1500 1000	2.68 1.79					6.4 4.3			12 8.0	21 14		35 24	46 31		65 44	80 53			130 86
	630	1500 1000	2.38 1.59								11 7.3	19 13			40 27			71 47			115 77
	710	1500 1000	2.1 1.4												34 23						

Thermal Capacity

Type PB.. -R1									
Average air speed	n ₁ (min ⁻¹)	Gearbox Size							
		10	12	16	20	25	31*)	40	45
		P _{t0} [kW] / without add. cooling							
V _w = 0.5 m/s 1)	-	46	77	127	179	234	318	on request	
V _w = 1.2 m/s 2)	-	65	110	182	256	334	454		
V _w = 4.0 m/s 3)	-	85	143	237	333	434	590		
		P _{t1} [kW] / with fan							
-	1500	110	213	354	497	650	883*)	on request	
-	1000	82	158	263	370	484	657*)		
		P _{t3} [kW] / with cooling coil							
V _w = 0.5 m/s 1)	-	-	177	505	691	1053	1415	on request	
V _w = 1.2 m/s 2)	-	-	210	560	768	1153	1551		
V _w = 4.0 m/s 3)	-	-	243	615	845	1253	1687		
		P _{t4} [kW] / with fan and cooling coil							
	1500	-	314	732	1009	1469	1979	on request	
	1000	-	234	545	751	1093	1472		
		P _{t8} [kW] / with 2 cooling coils							
V _w = 0.5 m/s 1)	-	-	277	883	1203	1872	2512	on request	
V _w = 1.2 m/s 2)	-	-	310	938	1280	1972	2648		
V _w = 4.0 m/s 3)	-	-	343	993	1357	2072	2784		
		P _{t9} [kW] / with fan and 2 cooling coils							
-	1500	-	413	1110	1521	2288	3077*)	on request	
-	1000	-	358	1019	1394	2122	2851*)		
*) Values for P _{t1} , P _{t4} & P _{t9} applicable for Gearbox size 31 only for i _n = 3.55 ...5.6									
V _w = 0.5 m/s	Values of P _{t0} & P _{t3} meant for gearbox sizes 20 to 31 are applicable from ratios as indicated (For smaller ratio, consult ELECON)				4	4	4		
V _w = 1.2 m/s					2.5	2.5	2.5		
V _w = 4.0 m/s					2.24	2.24	2.24		

Type PC...-R1																						
Average air speed	n ₁ (min ⁻¹)	Gearbox Size																				
		14	16	18	20	22	25	28	31	35	40	42	45	47	50	53	56	60	63	67		
		Pt0 [kW] / without add. cooling																				
V _w = 0.5 m/s 1)	-	30	40	50	64	78	94	111	132	149	191	216	260	315								
V _w = 1.2 m/s 2)	-	42	55	70	89	108	130	154	184	207	265	300	361	437	on request							
V _w = 4.0 m/s 3)	-	54	71	90	114	138	166	197	236	265	339	384	462	559								
		Pt1 [kW] / with fan																				
-	1500	82	108	136	173	210	252	299	359	403	515	583	702	850	on request							
-	1000	61	80	101	129	156	187	222	267	299	383	433	522	632								
		Pt3 [kW] / with cooling coil																				
V _w = 0.5 m/s 1)	-	85	163	113	232	246	414	347	576	469	876	728	945	1000								
V _w = 1.2 m/s 2)	-	97	178	133	257	276	450	390	628	527	950	812	1046	1122	on request							
V _w = 4.0 m/s 3)	-	109	193	153	282	306	486	433	680	585	1024	896	1147	1244								
		Pt4 [kW] / with fan and cooling coil																				
-	1500	137	231	199	341	378	572	535	803	723	1200	1095	1387	1535	on request							
-	1000	116	203	164	297	324	507	458	711	619	1068	945	1207	1317								
Pt0 and Pt3 meant for gearbox sizes 22-47 are applicable from ratios indicated. (For smaller ratios consult ELECON).																						
V _w = 0.5 m/s						8	8	8	8	12.5	12.5	12.5	12.5	12.5								
V _w = 1.2 m/s						4	5.6	4	5.6	7.1	7.1	9	9	9								
V _w = 4.0 m/s						4	5.6	4	5.6	5	5	6.3	6.3	6.3								

- 1) Small closed room, little air movement
- 2) Large hall with free air movement
- 3) Constantly strong air movement

Table 4 : f _w : Thermal Factor					
v u [°C]	ED %				
	100	80	60	40	20
10	1.14	1.21	1.34	1.53	2.03
20	1.00	1.06	1.17	1.34	1.78
30	0.86	0.91	1.00	1.15	1.53
40	0.71	0.76	0.84	0.96	1.27
50	0.57	0.61	0.67	0.77	1.02

Thermal capacities of types PC-S5 and -T6 on request

Table 5 : f _A : Utilization Factor								
Utilization P _e / P _N [%]								
20	30	40	50	60	70	80	90	100
0.7	0.8	0.86	0.9	0.93	0.96	0.98	0.99	1

For values less than 20% consult ELECON

Thermal Capacities

Type PD.. -R1																				
Average air speed	n ₁ (min ⁻¹)	Gearbox Size																		
		14	16	18	20	22	25	28	31	35	40	42	45	47	50	53	56	60	63	67
		Pto [kW] / without add. cooling																		
V _w = 0.5 m/s 1)	-	20	27	34	42	52	62	73	89	111	127	144	174	210	210	248	302	312	357	404
V _w = 1.2 m/s 2)	-	28	37	47	59	72	86	102	123	154	177	200	241	291	291	344	420	434	496	561
V _w = 4.0 m/s 3)	-	36	47	60	76	92	110	131	157	197	227	256	308	372	372	440	538	556	635	718
		Pt1 [kW] with fan																		
-	1500	54	72	91	115	140	168	199	239	300	343	389	468	566	566	669	817	on request		
-	1000	40	53	68	85	104	125	148	178	223	255	289	348	421	421	497	607			
		Pt3 [kW] / with cooling coil																		
V _w = 0.5 m/s 1)	-	57	109	76	154	134	276	231	385	325	584	485	631	667	780	986	1040	1050	1095	1142
V _w = 1.2 m/s 2)	-	65	119	89	171	154	300	260	419	368	634	541	698	748	861	1082	1158	1172	1234	1299
V _w = 4.0 m/s 3)	-	73	129	102	188	174	324	289	453	411	684	597	765	829	942	1178	1276	1294	1373	1456
		Pt4 [kW] / with fan & cooling coil																		
-	1500	91	154	133	227	222	382	357	535	514	800	730	925	1023	1136	1407	1555	on request		
-	1000	77	135	110	197	186	339	306	474	437	712	630	805	878	991	1235	1345			
V _w = 0.5 m/s)	Pto and Pt3 - meant for gear box sizes 35 - 67 are applicable from ratios indicated (For small ratios, consult ELECON)									20	20	22.4	22.4	22.4	28	28	28	31.5	31.5	31.5
V _w = 1.2 m/s)										16	20	16	20	25	20	20	22.4	22.4	22.4	
V _w = 4.0 m/s)										16	20	16	20	25	16	20	22.4	16	18	20

Type PE.. -R1																				
Average air speed	n ₁ (min ⁻¹)	Gearbox Size																		
		14	16	18	20	22	25	28	31	35	40	42	45	47	50	53	56	60	63	67
		Pto [kW] / without add. cooling																		
Vw = 0.5 m/s 1)	-	-	-	25	32	39	47	55	66	84	95	108	130	157	157	186	227	235	268	302
Vw = 1.2 m/s 2)	-	-	-	35	44	54	65	77	92	116	132	150	180	218	218	258	315	326	372	420
Vw = 4.0 m/s 3)	-	-	-	45	56	69	83	99	118	148	169	192	230	279	279	330	403	417	476	538
		Pt3 [kW] / with cooling coil																		
Vw = 0.5 m/s 1)	-	-	-	57	116	101	207	173	288	244	438	364	473	500	585	740	781	789	822	856
Vw = 1.2 m/s 2)	-	-	-	67	128	116	225	195	314	276	475	406	523	561	646	812	869	880	926	974
Vw = 4.0 m/s 3)	-	-	-	77	140	131	243	217	340	308	512	448	573	622	707	884	957	971	1030	1092

- 1) Small closed room, little air movement
- 2) Large hall with free air movement
- 3) Constantly strong air movement

Table 4 : f _w : Thermal Factor					
v _u [°C]	ED %				
	100	80	60	40	20
10	1.14	1.21	1.34	1.53	2.03
20	1.00	1.06	1.17	1.34	1.78
30	0.86	0.91	1.00	1.15	1.53
40	0.71	0.76	0.84	0.96	1.27
50	0.57	0.61	0.67	0.77	1.02

Thermal capacities of types PD.. PE-S5 and -T6 on request

Table 5 : f _A : Utilization Factor								
Utilization P _e / P _N [%]								
20	30	40	50	60	70	80	90	100
0.7	0.8	0.86	0.9	0.93	0.96	0.98	0.99	1

For values less than 20% Consult ELECON.

Nominal Output Torques

Helical Gear Units, one-stage

Type	Gearbox Size							
PB	10	12	16	20	25	31	40	45
i _N	Nominal Output Torques / T _{2N} [kNm]							
1.25	0.96	2.55	5.25	11.5	22.3	32.6		
1.4	0.98	2.67	5.53	12.0	23.2	33.9		
1.6	1.07	2.85	5.81	12.8	24.4	36.7		
1.8	1.10	2.98	6.07	13.3	25.2	38.4		
2	1.13	2.80	5.86	12.7	28.0	39.5		
2.24	1.14	2.85	5.99	13.1	28.5	39.9		
2.5	1.27	3.18	6.69	14.6	29.4	44.6		
2.8	1.23	3.03	6.24	13.9	28.5	42.8		
3.15	1.18	3.41	7.02	15.0	26.1	42.1		
3.55	1.29	3.16	6.55	13.1	26.0	44.1		
4	1.20	3.31	6.88	13.2	21.6	38.2	68.8	120
4.5	1.23	3.15	6.59	13.2	22.1	40.1	65.6	120
5	1.08	2.80	5.73	11.5	20.4	38.2	63.7	102
5.6	1.14	2.92	6.06	11.4	21.0	35.7	63.7	106

Helical Gear Units, two-stage

Type	Gearbox Size																														
PC	14	16	18	20	22	25	28	31	35	40	42	45	47	50	53	56	60	63	67												
i _N	Nominal Output Torques T _{2N} [kNM]																														
4	3.10		5.86		13.8		21.4		45.8		63.7																				
4.5			6.59		14.3		24.1		50.1		71.6																				
5	3.12		7.32		14.6		24.5		50.9	57.3	79.6	79.6																			
5.6	3.26		8.20	8.20	15.3	19.3	25.3	29.9	53.5	62.4	89.1	89.1																			
6.3		4.61	8.48	9.23	16.0	20.1	26.5	33.7	57.0	64.2	92.3	100	100																		
7.1		5.10	8.85	10.4	16.6	20.8	27.1	34.8		67.8	113	113																			
8		8.86	11.8	16.8	20.9	29.0	36.2	71.8		117		127																			
9					21.4		37.8	76	101	143																					
10					22.8	30.8	38.2			126	146																				
11.2					23.2	32.2	42.0	59.3	76	105	155	194	239																		
12.5														24.2	33.9	60.4															
14			5.41	8.36	11.8	16.5	24.6	32.0	43.5	57.0	79	104	131	194	239																
16	3.10	8.20	16.5	24.6												32.0	43.5	57.0	79	104	131	194	239								
18	3.16																														
20		5.10		11.8	16.5	24.6	32.0	43.5	57.0	79	104	131	194	239	297																
22.4																															
25																															
28																															

Nominal Output Torques

Helical Gear Units, three-stage

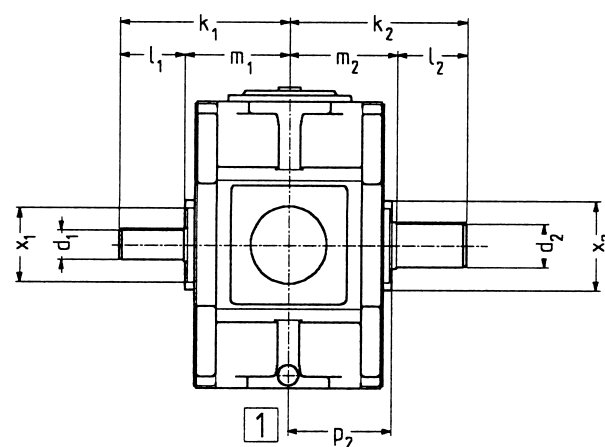
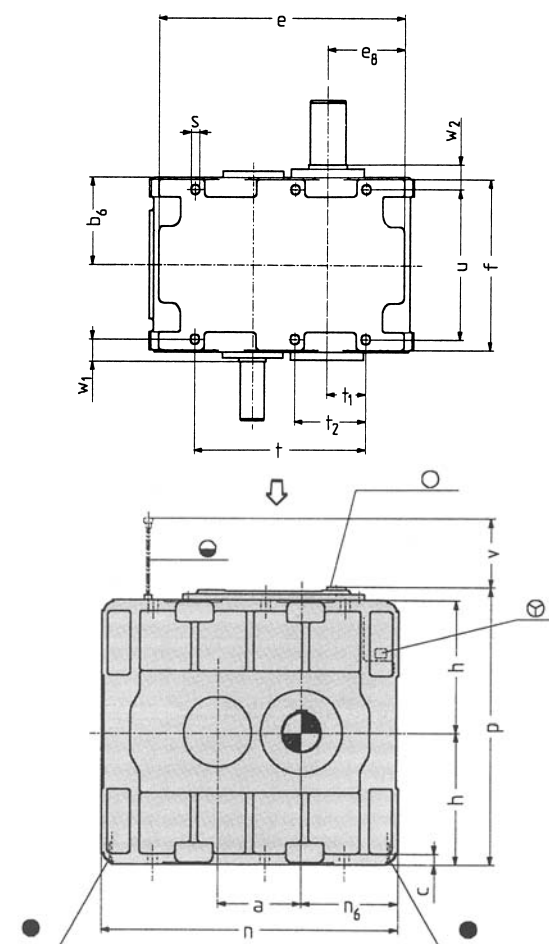
Type PD	Gearbox Size																		
	14	16	18	20	22	25	28	31	35	40	42	45	47	50	53	56	60	63	67
i_N	Nominal Output Torques T_{2N} [kNm]																		
16			8.86				27.6		59.3										
18			8.36				30.8		60.4										
20			8.20				32.0		57.0									416	
22.4	3.26		8.86		16.8		33.9	37.5	59.3	79.0	105	131			239			400	483
25	3.10		8.36		16.5	24.6	33.9	42.0	60.4	76.0		131	161		235	297		416	460
28	3.16		8.20			23.3	32.0	45.7	57.0	79.0		131	164		239	286		416	483
31.5	3.26	5.41			16.8	22.8	33.9	47.0	60.4		101	134	161		239	297		400	
35.5	3.26	5.41	8.36							76.0	105	129			235	297		400	
40	3.10				16.5	24.6	32.0	43.7	57.0		105	126	164	194	235	286	343	416	460
45	3.16	5.10	8.20			23.3	32.0	42.8		79.0	101	134	160		239	286		400	483
50			8.86		16.8	22.8	33.9	47.0	59.3	76.0	105	129	155		235	297		400	
56	3.26	5.41	8.36	11.8				43.7	60.4			126	164		235	286		416	460
63	3.10				16.5	24.6	32.0	42.8	57.0	79.0		131	160		239	286		416	
71	3.16	5.10	8.20			23.3		47.0			101	134	155		239	297		400	483
80			8.36				30.8	60.4		76.0	105	129	161		235	297		400	460
90		5.41						43.7	57.0		105	126	164		235	286		416	
100			8.20				32.0	42.8		79.0	101	134	160		239	286		400	483
112		5.10						42.0		76.0		129	155		235	297		400	460
125								43.7				126	164		235	286			
140								42.8					160						
160													155						

Helical Gear Units, Four-stage

Type PE	Gearbox Size																		
	14	16	18	20	22	25	28	31	35	40	42	45	47	50	53	56	60	63	67
i_N	Nominal Output Torques T_{2N} [kNm]																		
71					16.8		30.8		59.3										
80							33.2		60.4									416	
90			8.86		16.5	24.6	32.0		57.0		105	131			239			400	483
100			8.36		16.8	23.3	30.8	42.0	59.3	79.0		134			235	297		416	460
112						22.8	33.2	45.2	60.4			131	161		239	286		416	483
125			8.20		16.5	24.6	32.0	43.7	57.0	76.0		131	164		239	286		416	483
140			8.86		16.8	23.3		42.0		79.0	101	134	161		239	297		400	
160			8.36			22.8	33.2	45.2	60.4			129			235	297		400	460
180			8.20		16.5	23.3	32.0	43.7	57.0	76.0	105	126	164	194	235	286	343	416	460
200						23.3		42.8			101	134	160		239	286		400	483
224			8.86	11.8	16.8	22.8	30.8	45.2	59.3	79.0	105	129	155		235	297		400	460
250			8.36				33.2	43.7	60.4		105	126	164		235	286		416	
280					16.5	24.6	32.0	42.8	57.0	76.0		131	160		239	286		416	483
315			8.20			23.3		42.0			101	134	155		239	297		400	460
355					16.8	22.8	33.2	45.2	60.4	79.0	105	129	161		235	286		416	483
400							32.0	43.7	57.0	76.0	105	126	164		235	286		416	460
450					16.5	23.3		42.8			101	134	160		239	286		400	483
500								45.2		79.0		129	155		235	297		400	
560						22.8		43.7		76.0		126	164		235	286			460
630								42.8					160						
710													155						

Dimensions

Type PB 10-R1 ... PB 45-R1



- Filling Plug yellow
- Oil Level blue
- Oil Drain red
- ⊙ Breather

d_1, d_2	30	35	40..50	60..80	≥ 95
Tapped centre holes in shaft ends DIN 332 Form DS	M 10	M 12	M 16	M 20	M 24

Keys to DIN 6885/1 supplied by ELECON

Type of protection as per IP 55

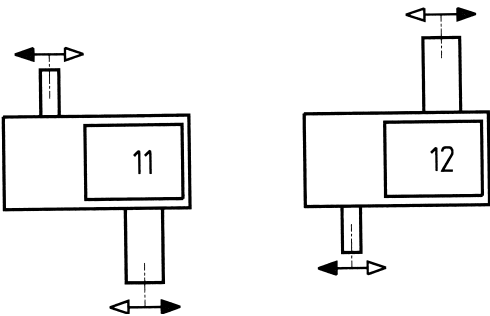
Type	Input shaft										Output Shaft					Weight [kg]	Oil filling [l] *
	i_N	$\varnothing d_1$ m6	k_1	l_1	i_N	$\varnothing d_1$ m6	k_1	l_1	m_1	$\varnothing x_1$	$\varnothing d_2$ m6	k_2	l_2	m_2	$\varnothing x_2$		
PB 10	1.25...	35 k6	226	100	3.55...	30 k6	226	100	126	—	45 k6	246	120	126	—	70	4.5
PB 12		50 k6	280	120		40 k6	280	120	160	165	60	305	145	160	165	140	10
PB 16		70	338	145		50 k6	318	125	193	205	80	363	170	193	195	270	20
PB 20		80	396	170		65	371	145	226	235	95	396	170	226	235	430	40
PB 25	3.15	100	495	215	5.6	80	450	170	280	295	120	495	215	280	300	750	70
PB 31		130	582	250		100	547	215	332	368	140	582	250	332	328	1200	120
PB 40		160	680	290		130	640	250	390	440	165	695	290	405	400	2000	120
PB 45		180	790	330		160	750	290	460	540	185	805	330	475	440	3250	160

Type	a	b_6	c	e	e_8	f	h -0.2	n	n_6	p	p_2	Fitting		t	t_1	t_2	u	v	w_1	w_2
												$\varnothing s$	$d_s \times l_{max}$							
PB 10	94	113	15	338	107	216	150	364	120	333	—	12	M10x45	218	50	—	192	240	30	30
PB 12	127	147	16	448	147	284	190	480	163	404	158	14,5	M12x70	311	78	—	248	305	36	36
PB 16	164	179	22	556	179	348	265	600	201	560	190	18,5	M16x110	396	99	—	306	415	40	40
PB 20	201	210	26	662	207	410	315	714	233	663	223	24	M20x130	461	104	—	360	495	46	46
PB 25	247	225	28	772	251	438	375	824	277	787	269	24	M20x160	574	152	—	388	590	86	86
PB 31	302	270	30	928	297	522	425	980	323	887	314	28	M24x180	716	191	315	468	690	98	98
PB 40	374	325	35	968	303	630	450	1220	421	913	363	28	M24x200	906	270	410	576	440	102	117
PB 45	449	395	45	1197	371	774	475	1494	515	962	440	35	M30x160	1115	330	485	712	550	104	119

* Exact values are indicated on the nameplate

Location of input and output shafts

Directions of rotation viewing ↗



K	PB	16	-	R1	1	-	V	11	-	5	-	Z	1
---	----	----	---	----	---	---	---	----	---	---	---	---	---

Motor attachment

[K] Motor bell housing

[M] Adjustable motor base

[J] Motor bracket, base plate

Helical gear unit, EP-Series, [B] 1 stage

Size

[R1] Horizontal gear unit

Mounting arrangement

[1] Foot mounted

Output shaft

[V] Solid shaft

Location of shafts

Permissible direction of rotation

Nominal ratio

[z] Add. cooling

[0] Without add. cooling

[1] 1 Fan

[3] Cooling coil

[4] 1 Fan + Cooling coil

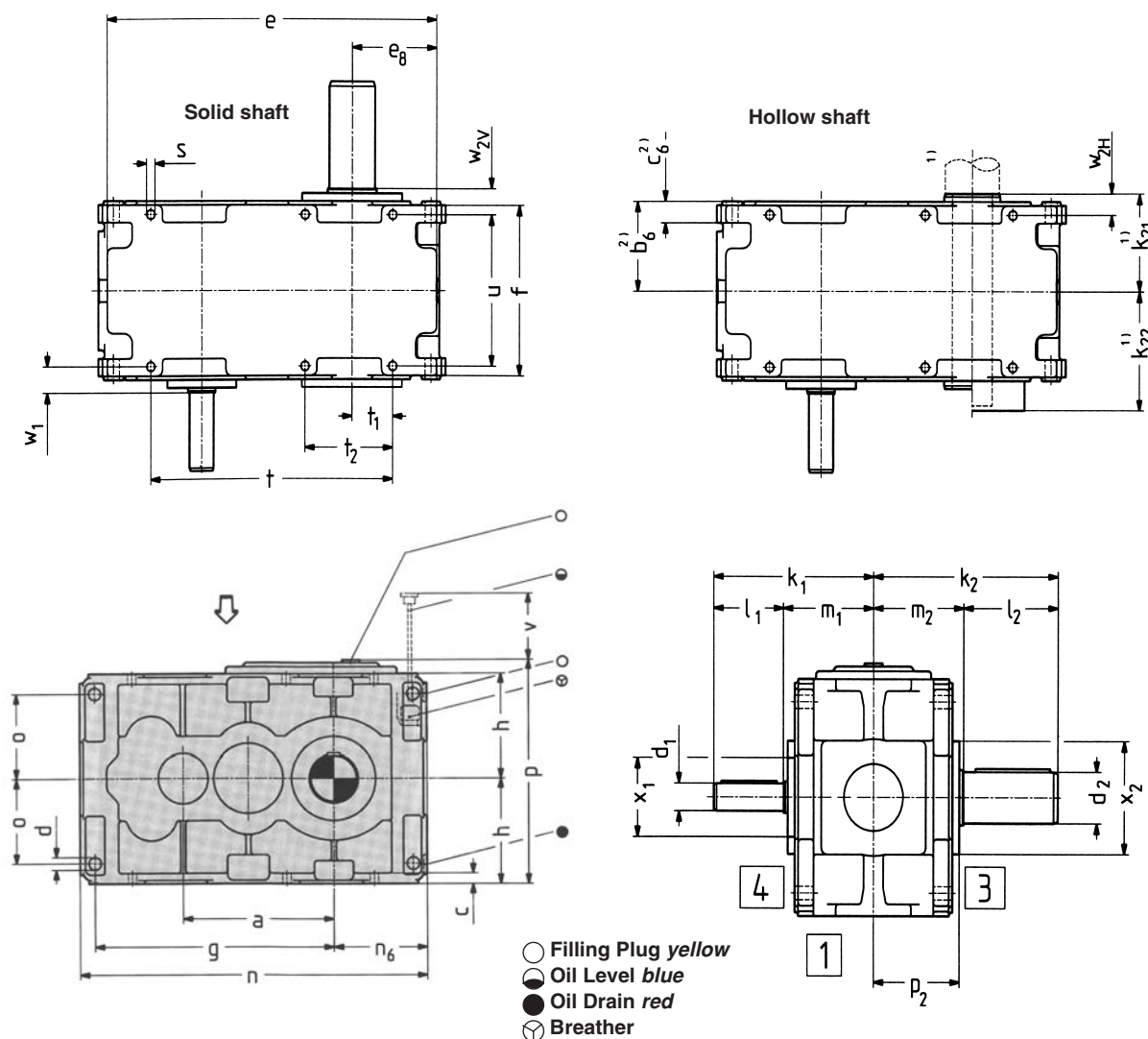
[8] 2 Cooling coils

[9] 1 Fan + 2 Cooling coils

Example

Dimensions

Type PC 14-R1 ... PC 31-R1



Type	Input shaft					Output shaft					Weight [kg]	Oil filling [l]
	Ø d1	k1	l1	m1	Ø x1	Ø d2 m6	k2	l2	m2	Ø x2		
PC 14	35 k6	218	100	118	-	65	270	135	135	-	105	6
PC 16	35 k6	218	100	118	-	85	290	145	145	-	155	9
PC 18	45 k6	275	120	155	-	95	350	170	180	-	225	14
PC 20	45 k6	275	120	155	-	120	370	190	180	-	310	19
PC 22	60 m6	337	140	197	195	130	405	190	215	-	420	27
PC 25	60 m6	337	140	197	195	145	450	230	220	296	555	35
PC 28	70 m6	369	140	229	205	160	480	230	250	328	705	46
PC 31	70 m6	369	140	229	205	175	540	290	250	348	995	63

d1, d2	35	45	60...85	> 85
Tapped centre holes in shaft ends DIN 332 Form DS	M 12	M 16	M 20	M 24

Keys to DIN 6885/1 supplied by ELECON

Type of protection as per IP 55

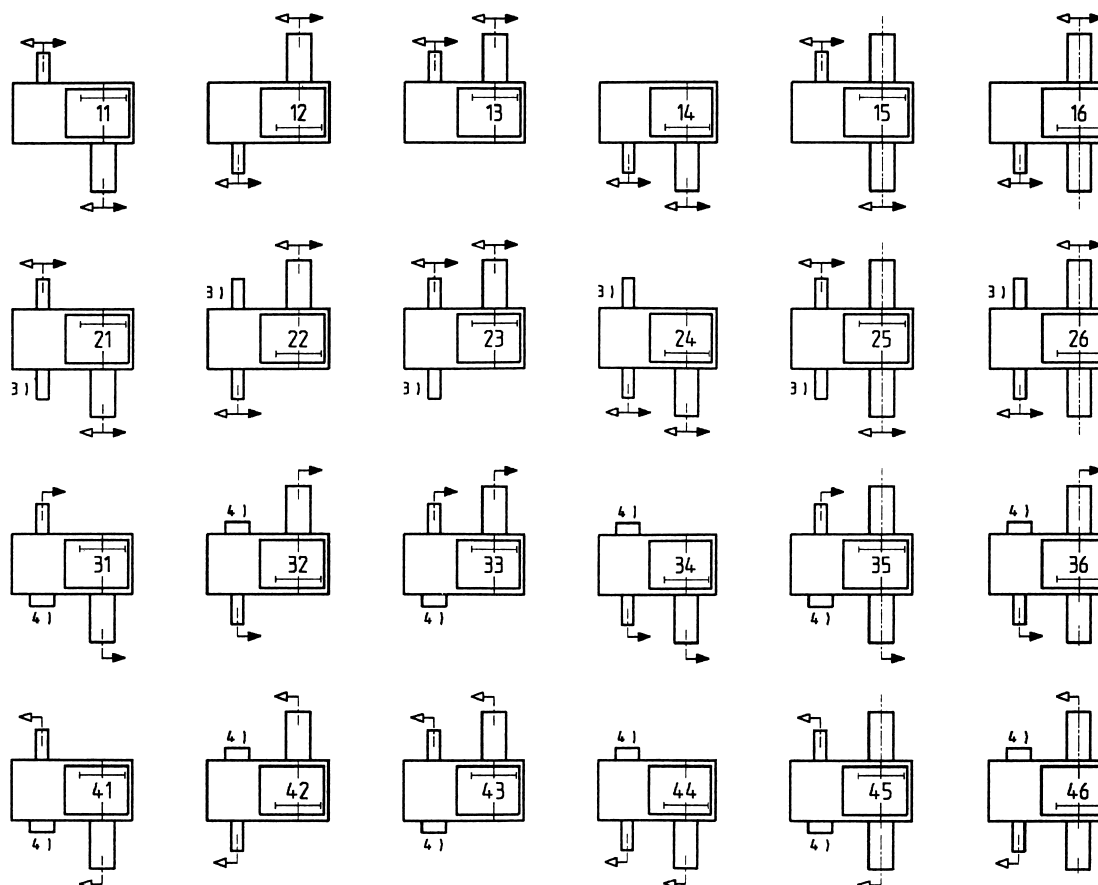
Type	a	b6 -0.2	c	c6	Ø d H9	e	e8	f	g	h -0.2	n	n6	o	p	p2	Fitting		t	t1	t2	u	v	w1	w2V	w2H
																Ø s	ds x lmax								
PC 14	216	113	15	27	16	474	121	216	344	150	500	134	121	333	-	12	M10x45	348	58	125	192	30	22	39	27
PC 16	272	113	15	27	16	579	170	216	400	180	605	183	151	393	-	12	M10x80	453	107	217	192	75	22	49	27
PC 18	293	147	18	32	22	622	155	284	458	190	654	171	155	419	-	14.5	M12x55	486	87	175	248	45	31	56	33
PC 20	347	147	18	32	22	732	211	284	511	225	764	227	190	489	-	14.5	M12x90	596	143	285	248	70	31	56	33
PC 22	376	179	24	41	26	782	193	346	580	235	826	215	190	513	-	18.5	M16x65	622	113	226	306	60	44	62	36
PC 25	434	179	24	41	26	896	249	346	638	265	940	271	220	573	204	18.5	M16x90	736	169	340	306	100	44	67	62
PC 28	464	210	28	48	33	948	230	408	706	280	1000	256	227	610	246	24	M20x80	752	132	265	360	80	49	70	70
PC 31	532	210	28	48	33	1085	299	408	773	315	1137	325	262	680	239	24	M20x110	889	201	402	360	90	49	70	70

1) Hollow shaft and machine shaft see dimensions 900-0212-MB 1 and 900-0213-MB1

2) Torque arms see dimensions 900-0253-MB1

Location of input and output shafts

Directions of rotation viewing ↗

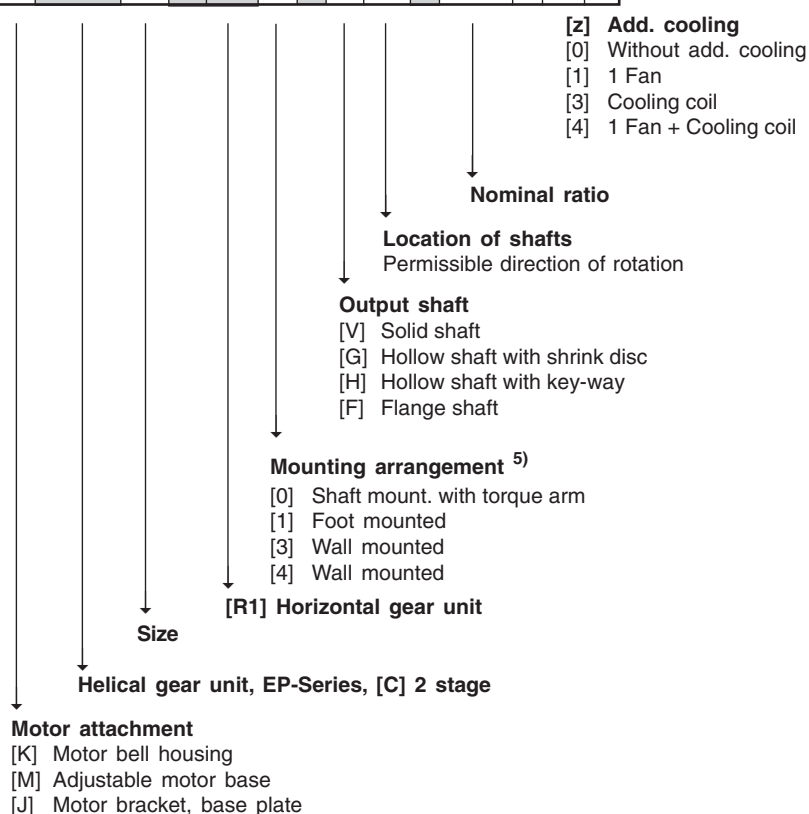


3) Add. shaft extension or double ext. shaft (900-0200-..)

4) Backstop

K	PC	22	-	R1	1	-	V	11	-	14	-	Z	1
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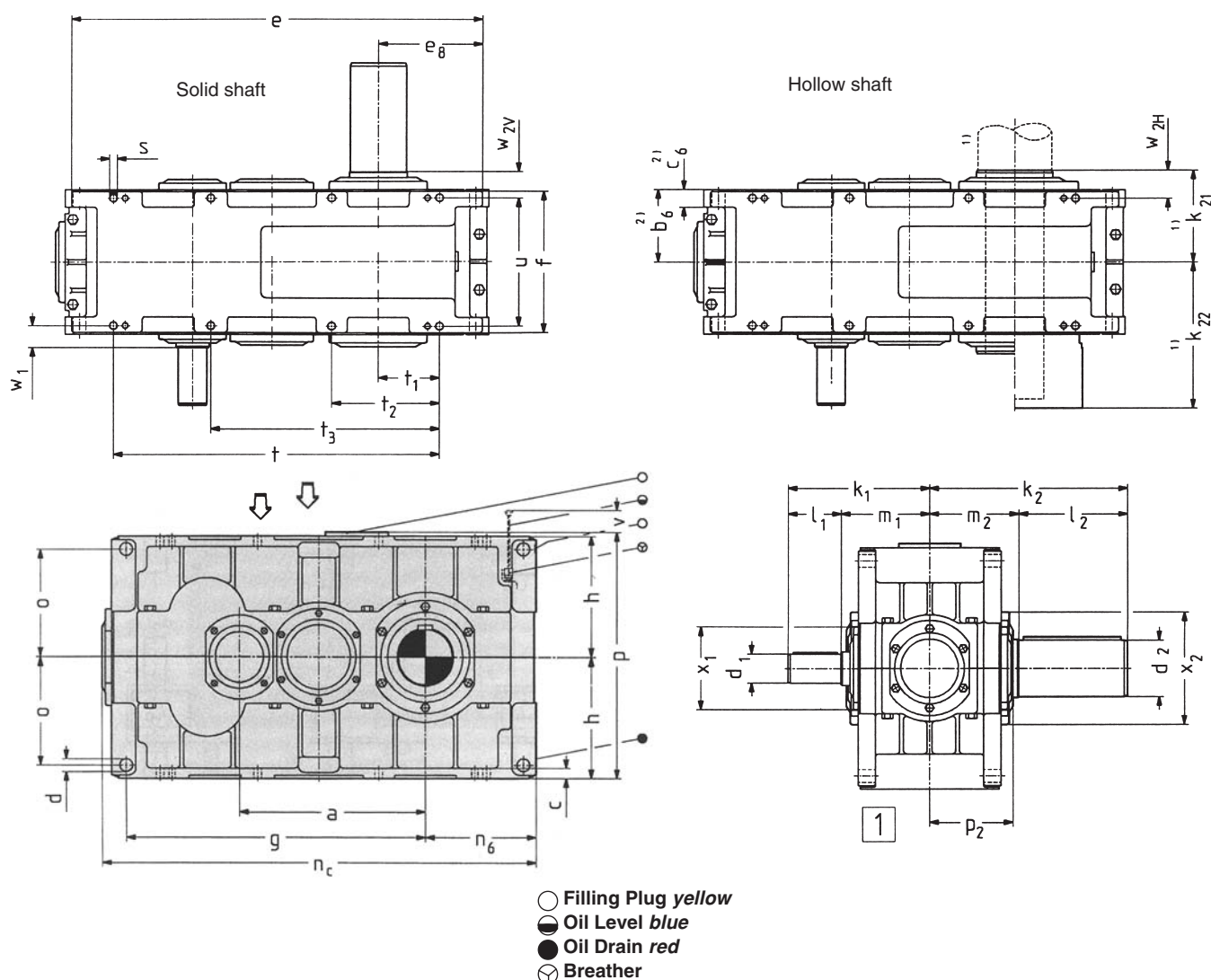
Example



5) See dimension sheet 900-0220-MB9

Dimensions

Type PC 35-R1 ... PC 56-R1



Type	Input shaft					Output shaft					Weight [kg]	Oil filling [l]
	Ø d ₁ m6	k ₁	l ₁	m ₁	Ø x ₁	Ø d ₂ m6	k ₂	l ₂	m ₂	Ø x ₂		
PC 35	90	446	180	266	255	155	570	290	280	328	1420	55
PC 40	90	446	180	266	255	175	570	290	280	348	1750	75
PC 42	100	537	215	322	328	195	650	330	320	400	2130	90
PC 45	100	537	215	322	328	210	730	410	320	440	2650	130
PC 47	100	537	215	322	328	230	730	410	320	440	3240	175
PC 50	120	600	215	385	348	250	795	410	385	480	3900	190
PC 53	120	600	215	385	348	250	795	410	385	480	4400	250
PC 56	120	600	215	385	348	270	845	460	385	540	5600	350

d ₁ , d ₂	≥ 90
Tapped centre holes in shaft ends DIN 332 Form DS	M 24

Keys to DIN 6885/1 supplied by ELECON

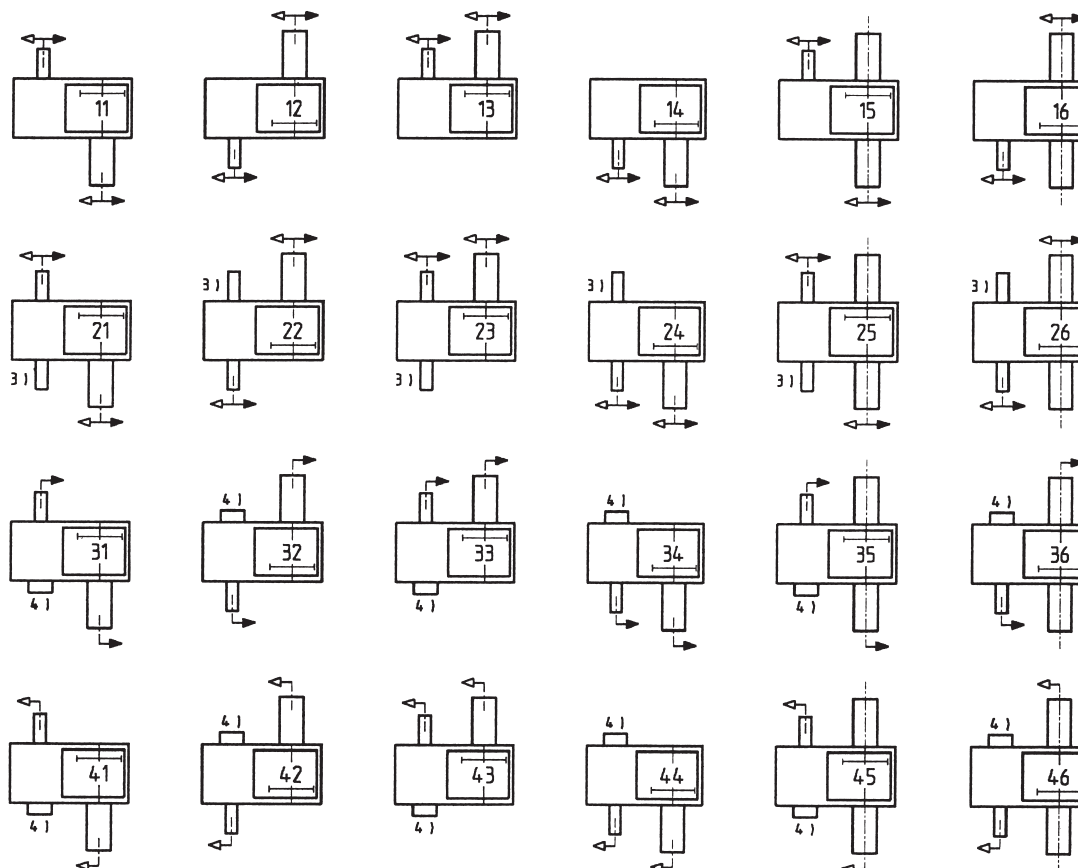
Type of protection as per IP 55

Type	a	b ₆	c	c ₆	Ø d _{H9}	e	e ₈	f	g	h _{-0.2}	n _c	n ₆	o	p	p ₂	Ø s	d _s x l _{max}	t	t ₁	t ₂	t ₃	u	v	w ₁	w _{2v}	w _{2H}
PC 35	570	225	32	55	40	1275	325	438	925	300	1346	345	255	610	262	24	M20x85	1005	190	325	695	396	190	68	82	87
PC 40	647	225	32	55	40	1430	403	438	1002	375	1501	423	330	760	262	24	M20x120	1157	265	477	847	396	220	68	82	87
PC 42	693	265	40	62	45	1555	392	514	1134	355	1652	422	305	720	303	28	M24x100	1230	225	390	820	460	250	92	90	85
PC 45	759	265	40	62	45	1689	460	514	1200	425	1786	490	375	860	303	28	M24x120	1356	285	516	946	460	250	92	90	90
PC 47	845	265	40	62	52	1860	545	514	1285	500	1957	575	440	1010	303	28	M24x250	1527	370	687	1117	460	250	92	90	100
PC 50	857	320	50	75	60	1892	470	620	1392	425	1962	505	360	860	358	35	M30x120	1524	280	504	1014	560	250	105	105	110
PC 53	928	320	50	75	60	2038	545	620	1463	500	2108	580	435	1010	358	35	M30x180	1670	355	650	1160	560	250	105	105	110
PC 56	1021	320	50	75	60	2231	645	620	1556	600	2301	680	535	1210	365	35	M30x250	1858	450	838	1348	560	250	105	105	110

- 1) Hollow shaft and machine shaft see dimensions 900-0212-MB 1 and 900-0213-MB1
- 2) Torque arms see dimensions 900-0253-MB1

Location of input and output shafts

Directions of rotation viewing ↷

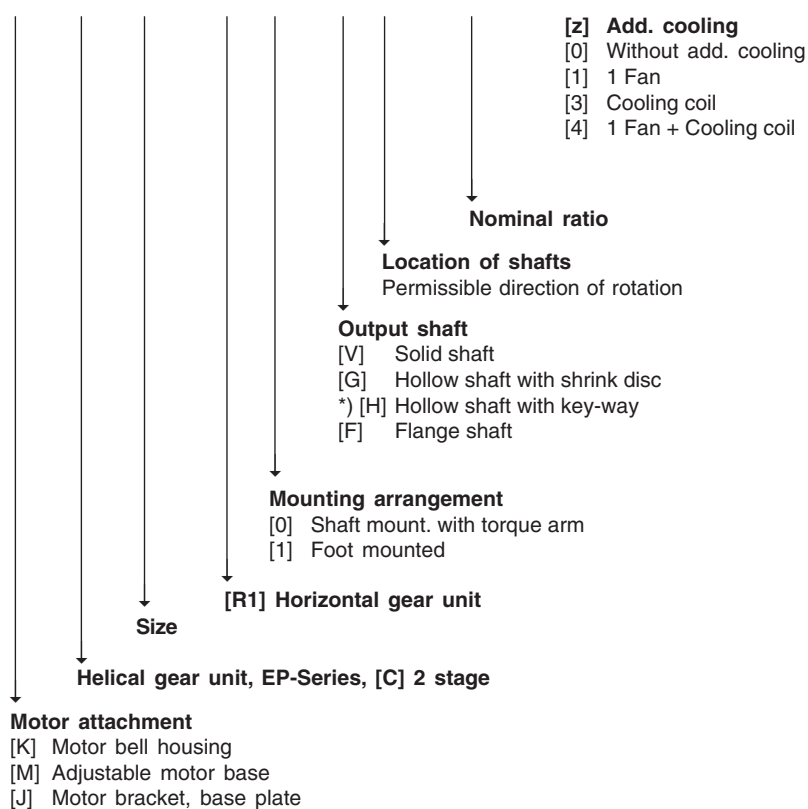


3) Add. shaft extension or double ext. shaft

4) Backstop

K PC 35 - R1 1 - V 11 - 14 - Z 1

Example

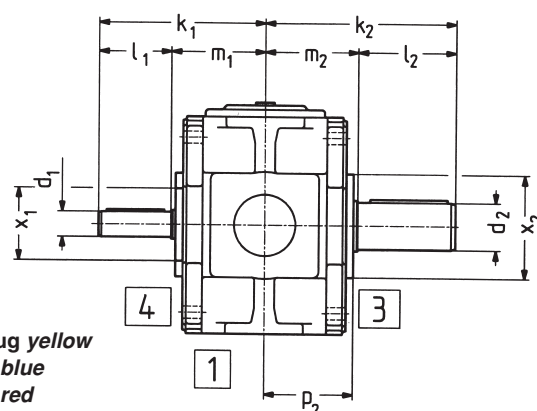
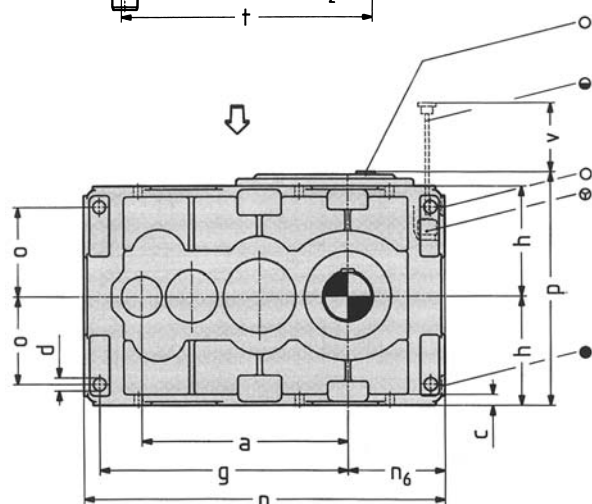
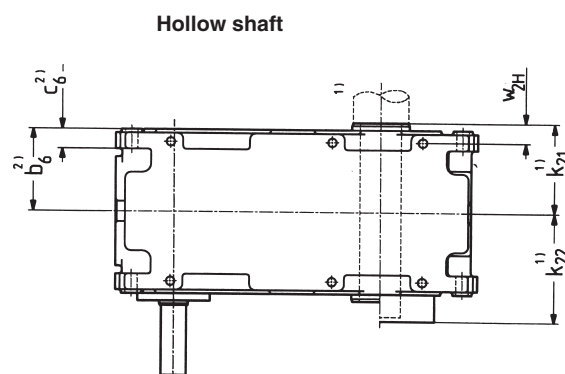
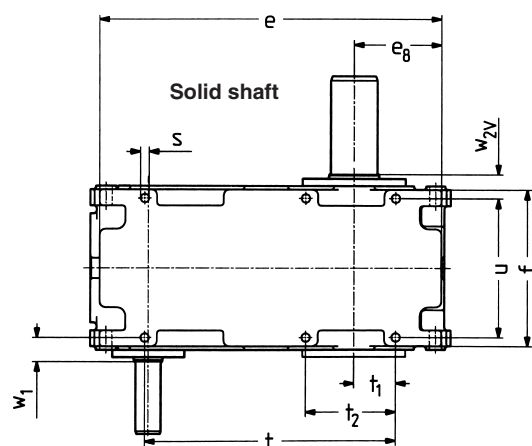


*) Only types PC35 and PC40

Dimensions

3.99

Type PD 14-R1 ... PD 31-R1



- Filling Plug yellow
- Oil Level blue
- Oil Drain red
- Breather

Type	Input Shaft						Output Shaft					Weight [kg]	Oil filling [l]
	in	Ø d ₁ k ₆	k ₁	l ₁	m ₁	Ø x ₁	Ø d ₂ m ₆	k ₂	l ₂	m ₂	Ø x ₂		
PD 14	20...71	25	203	82	121	-	65	270	135	135	-	110	6
PD 16	31.5...112						85	290	145	145		160	9
PD 18	16...45	35	283	100	183	-	95	350	170	180	-	230	14
	50...100	30											
PD 20	22.4...63	35	283	100	183	-	120	370	190	180	-	320	20
	71...140	30											
PD 22	20...45	50	347	120	227	130	130	405	190	215	-	440	27
	50...71	40											
PD 25	25...56	50	347	120	227	130	145	450	230	220	296	575	35
	63...90	40											
PD 28	16...45	50	362	120	242	-	160	480	230	250	328	725	47
	50...100	40											
PD 31	22.4...63	50	362	120	242	-	175	540	290	250	348	1015	64
	71...140	40											

Tapped centre holes in shaft ends DIN 332 Form DS				
d1, d2				
25...30	35	40...50	65...85	> 85
M 10	M 12	M 16	M 20	M 24

Keys to DIN 6885/1 supplied by ELECON

Type of protection as per IP 55

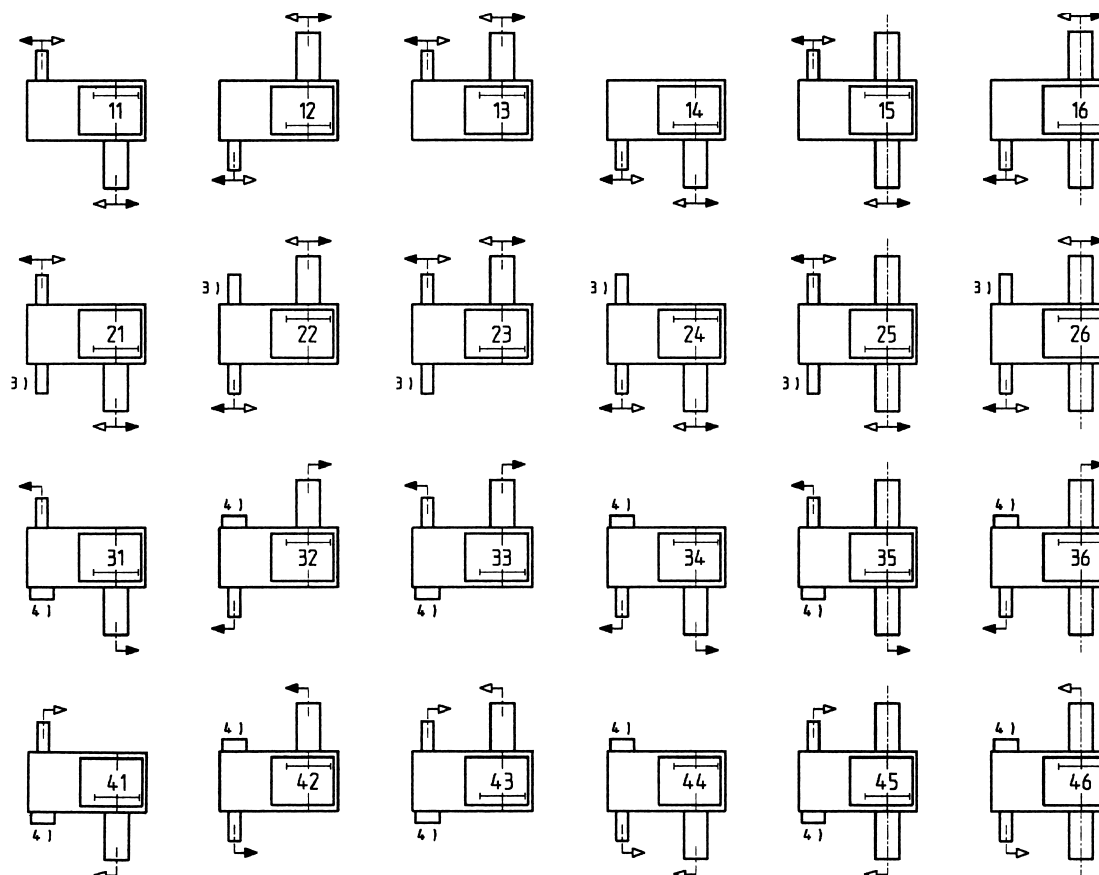
Type	a	b _{-0.2}	c	c ₆	Ø _{d H9}	e	e ₈	f	g	h _{-0.2}	n	n ₆	o	p	p ₂	Fitting		t	t ₁	t ₂	u	v	w ₁	w _{2v}	w _{2H}
																Ø s	d _s x l _{max}								
PD 14	285	113	15	27	16	474	121	216	344	150	500	134	121	333	-	12	M10x45	348	58	125	192	25	25	39	27
PD 16	341	113	15	27	16	579	170	216	400	180	605	183	151	393	-	12	M10x80	453	107	217	192	70	25	49	27
PD 18	387	147	18	32	22	622	155	284	458	190	654	171	155	419	-	14.5	M12x55	486	87	175	248	40	59	56	33
PD 20	441	147	18	32	22	732	211	284	511	225	764	227	190	489	-	14.5	M12x90	596	143	285	248	65	59	56	33
PD 22	492	179	24	41	26	782	193	346	580	235	826	215	190	513	-	18.5	M16x65	622	113	226	306	55	74	62	36
PD 25	550	179	24	41	26	896	249	346	638	265	940	271	220	573	204	18.5	M16x90	736	169	340	306	95	74	67	62
PD 28	591	210	28	48	33	948	230	408	706	280	1000	256	227	610	246	24	M20x80	752	132	265	360	65	62	70	70
PD 31	659	210	28	48	33	1085	299	408	773	315	1137	325	262	680	239	24	M20x110	889	201	402	360	75	62	70	70

1) Hollow shaft and machine shaft see dimensions 900-0212-MB 1 and 900-0213-MB1

2) Torque arms see dimensions 900-0253-MB1

Location of input and output shafts

Directions of rotation viewing ↗

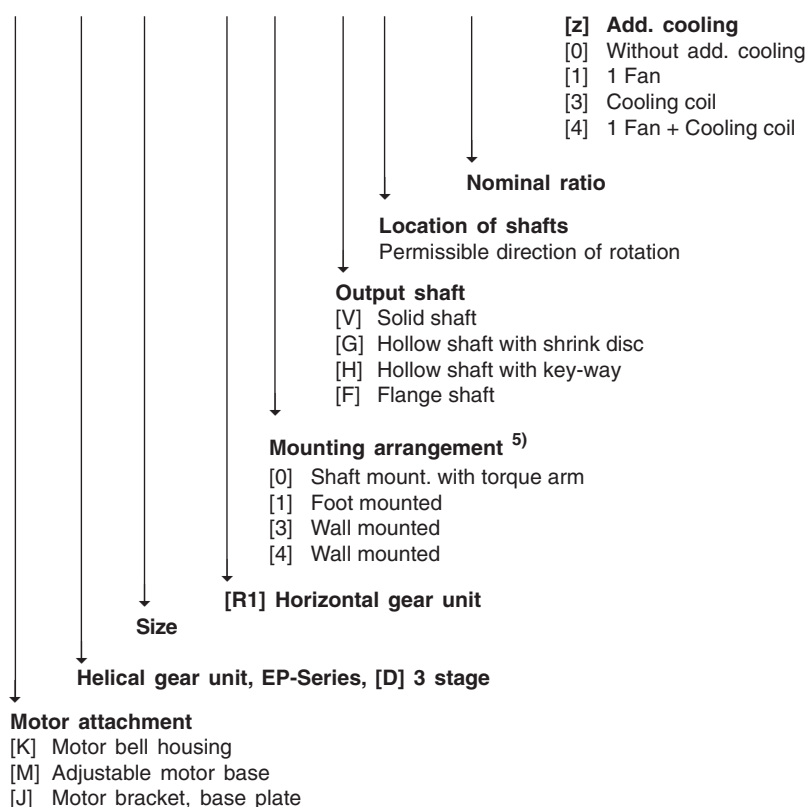


3) Add. shaft extension or double ext. shaft (900-0200-...)

4) Backstop

K	PD	22	-	R1	1	-	V	11	-	25	-	Z	1
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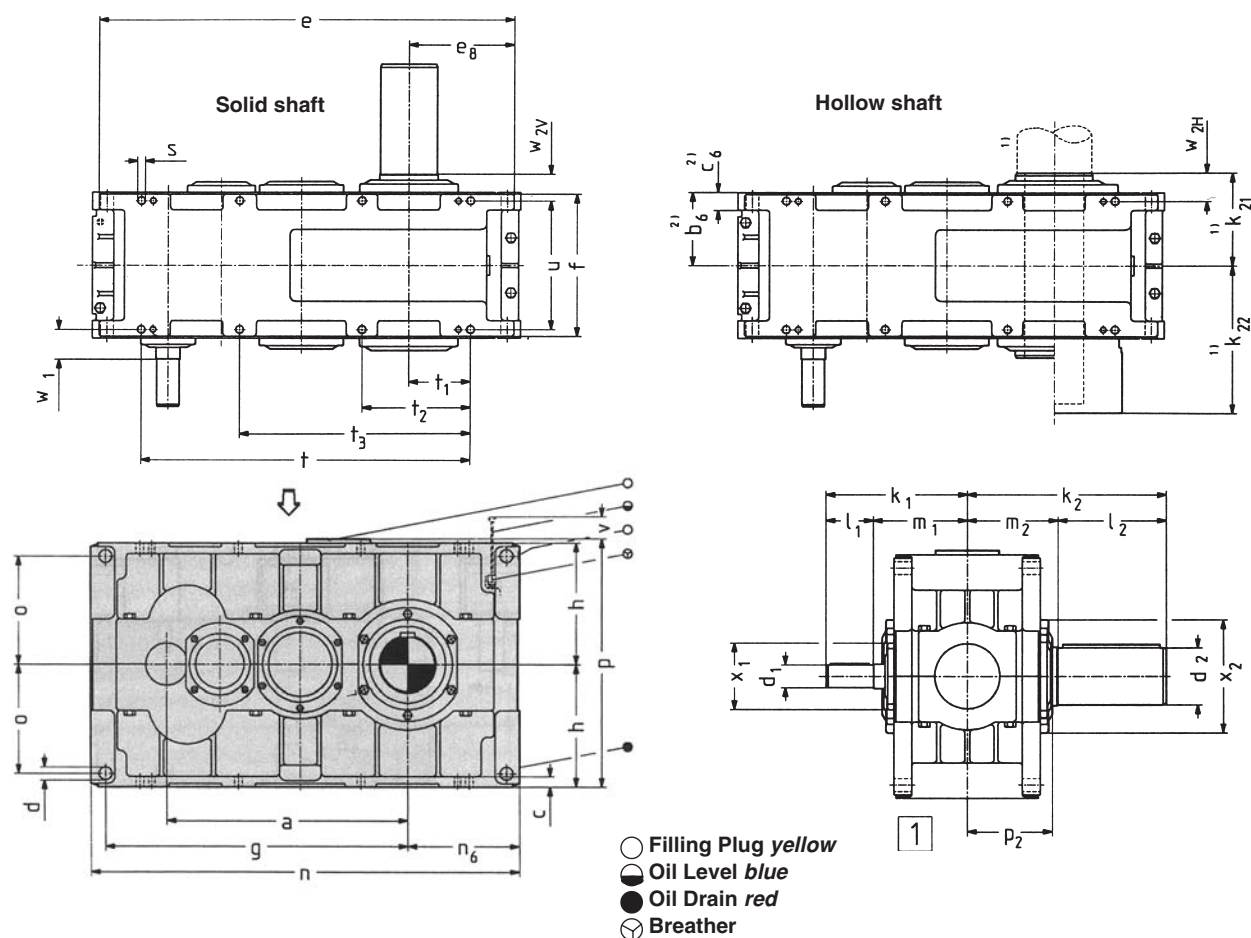
Example



5) See dimension sheet 900-0220-MB9

Dimensions

Type PD 35-R1 ... PD 67-R1



d1, d2	50	65...80	≥ 90
Tapped centre holes in shaft ends DIN 332 Form DS	M16	M20	M24

Keys to DIN 6885/1 supplied by ELECON

Type of protection as per IP 55

Type	Input Shaft										Output Shaft					Weight [kg]	Oil filling [l]
	iN	Ø d1 m6	k1	l1	iN	Ø d1 m6	k1	l1	m1	Ø x1	Ø d2 m6	k2	l2	m2	Ø x2		
PD 35	16...45	70	435	145	50...100	50 k6	415	125	290	205	155	570	290	280	328	1470	60
PD 40	20...56	70	435	145	63...125	50 k6	415	125	290	205	175	570	290	280	348	1800	80
PD 42	16...45	80	508	170	50...100	65	483	145	338	245	195	650	330	320	400	2200	100
PD 45	20...56	80	508	170	63...125	65	483	145	338	245	210	730	410	320	440	2720	140
PD 47	25...71	80	508	170	80...160	65	483	145	338	245	230	730	410	320	440	3300	190
PD 50	16...100	100	595	215	-	-	-	-	380	290	250	795	410	385	480	4100	200
PD 53	20...125	100	595	215	-	-	-	-	380	290	250	795	410	385	480	4750	260
PD 56	22.4...140	100	595	215	-	-	-	-	380	290	270	845	460	385	540	5800	360
PD 60	16...100	130	715	250	-	-	-	-	465	390	290	920	460	460	540	6800	380
PD 63	18...112	130	715	250	-	-	-	-	465	390	310	970	510	460	580	7800	480
PD 67	20...125	130	715	250	-	-	-	-	465	390	310	970	510	460	580	8900	580

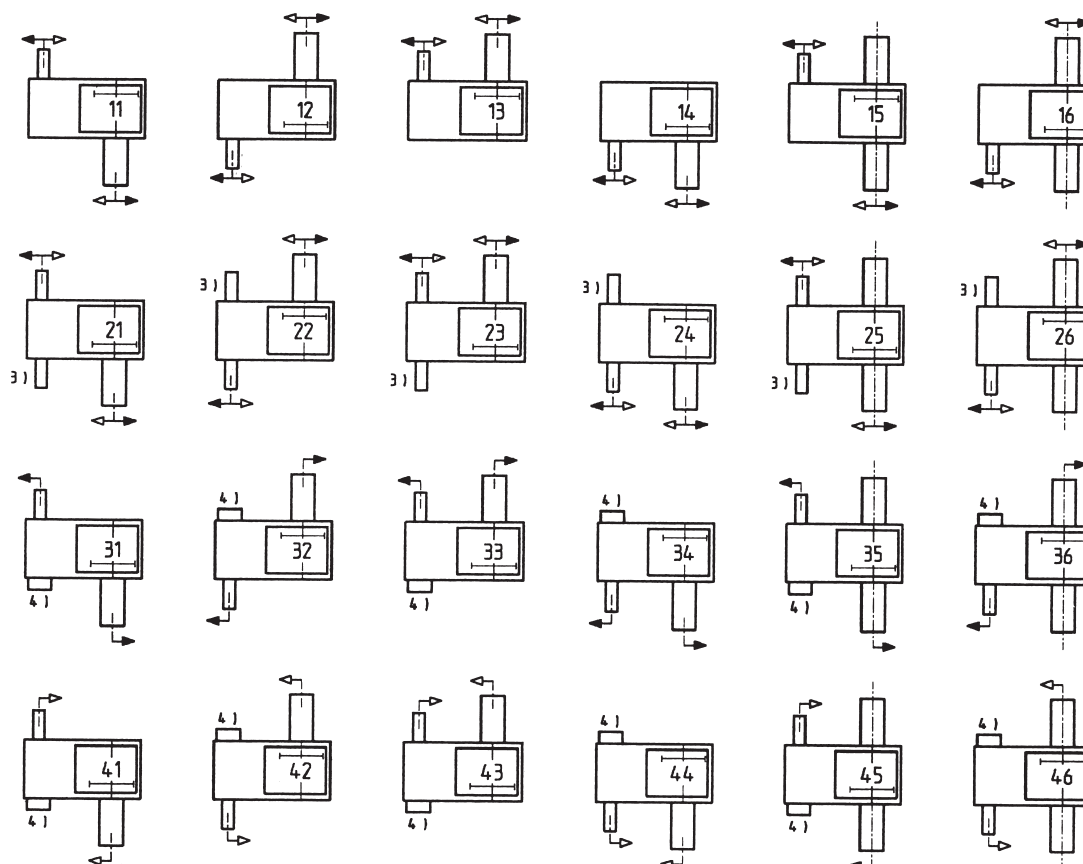
Type	a	b6	c	c6	Ø dH9	e	e8	f	g	h -0.2	n	n6	o	p	p2	Ø s	Fitting ds x lmax	t	t1	t2	t3	u	v	w1	w2v	w2H
PD 35	734	225	32	55	40	1275	325	438	925	300	1315	345	255	610	262	24	M20x85	1005	190	325	695	396	190	92	82	87
PD 40	811	225	32	55	40	1430	403	438	1002	375	1470	423	330	760	262	24	M20x120	1157	265	477	847	396	220	92	82	87
PD 42	894	265	40	62	45	1555	392	514	1134	355	1615	422	305	720	303	28	M24x100	1230	225	390	820	460	250	108	90	85
PD 45	960	265	40	62	45	1689	460	514	1200	425	1749	490	375	860	303	28	M24x120	1356	285	516	946	460	250	108	90	90
PD 47	1046	265	40	62	52	1860	545	514	1285	500	1920	575	440	1010	303	28	M24x250	1527	370	687	1117	460	250	108	90	100
PD 50	1104	320	50	75	60	1892	470	620	1392	425	1962	505	360	860	358	35	M30x120	1524	280	504	1014	560	250	100	105	110
PD 53	1175	320	50	75	60	2038	545	620	1463	500	2108	580	435	1010	358	35	M30x180	1670	355	650	1160	560	250	100	105	110
PD 56	1268	320	50	75	60	2231	645	620	1556	600	2301	680	535	1210	365	35	M30x250	1858	450	838	1348	560	250	100	105	110
PD 60	1334	395	60	90	65	2272	565	770	1669	530	2342	600	460	1070	440	42	M36x150	1840	345	630	1200	690	350	120	115	120
PD 63	1407	395	60	90	65	2420	640	770	1742	600	2490	675	530	1210	440	42	M36x200	1988	420	778	1348	690	350	120	115	120
PD 67	1478	395	60	90	70	2566	715	770	1806	670	2636	750	590	1350	440	42	M36x250	2134	495	924	1494	690	350	120	115	120

1) Hollow shaft and machine shaft see dimensions 900-0212-MB 1 and 900-0213-MB1

2) Torque arms see dimensions 900-0253-MB1

Location of input and output shafts (up to size 47)

Directions of rotation viewing ↷

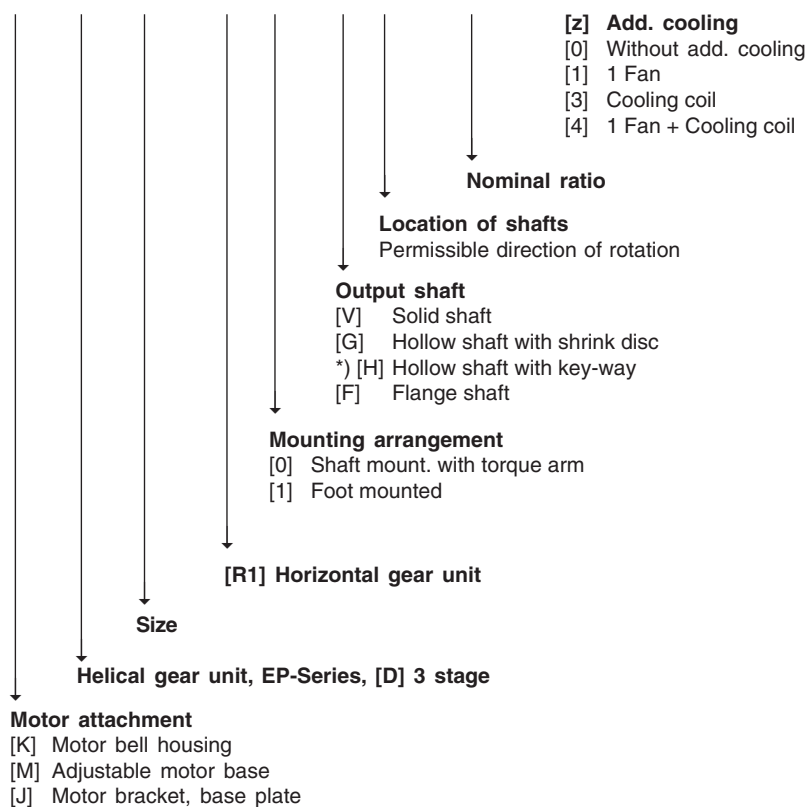


3) Add. shaft extension or double ext. shaft (900-0200-...)

4) Backstop

K	PD	35	-	R1	1	-	V	11	-	25	-	Z	1
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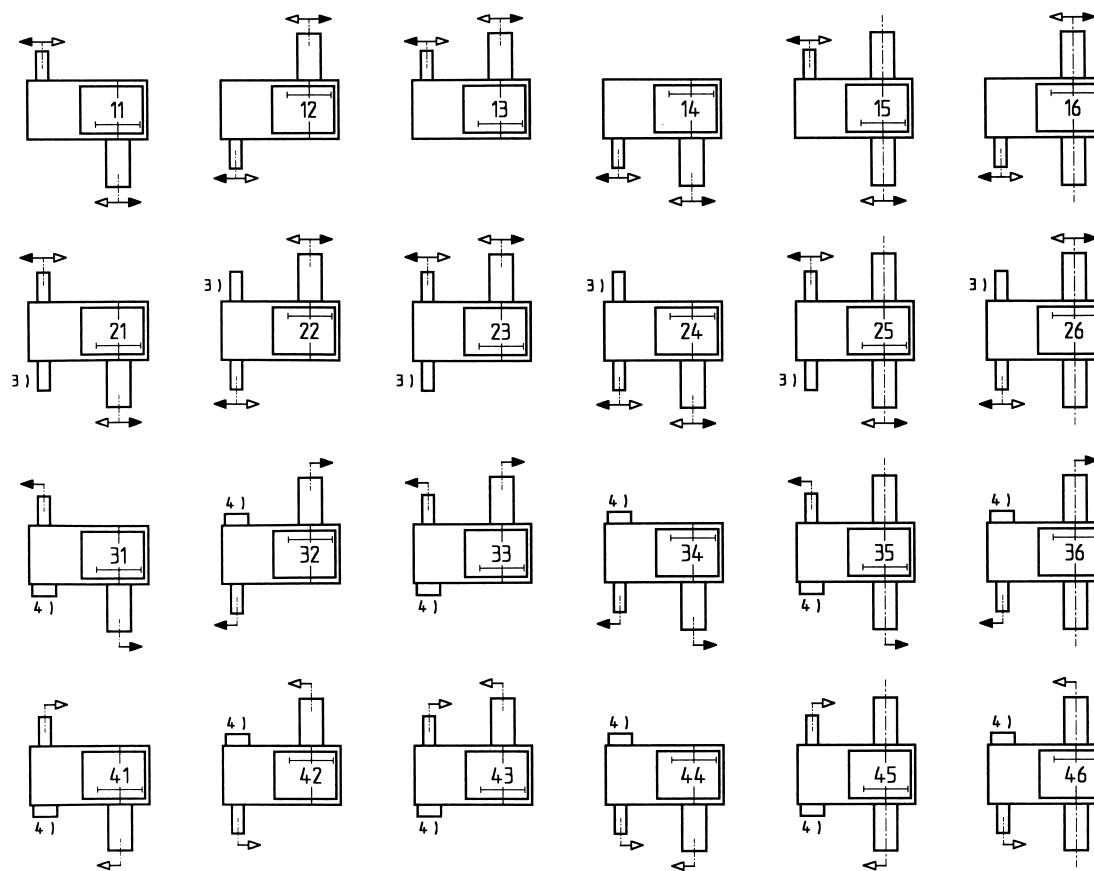
Example



*) Only types PD35 and PD 40

Location of input and output shafts (from size 50..)

Directions of rotation viewing ↷

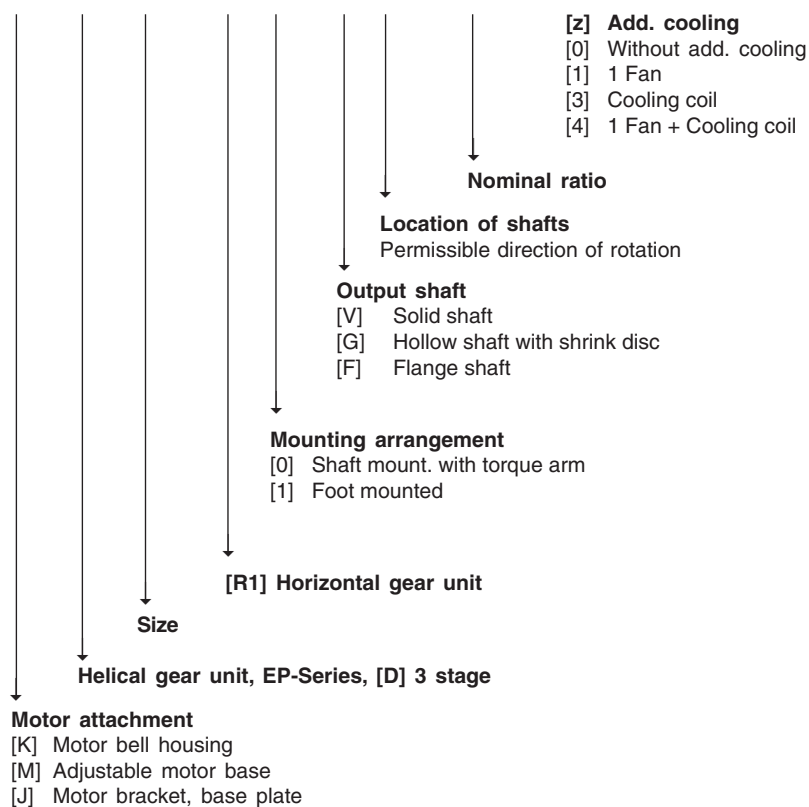


3) Add. shaft extension or double ext. shaft (900-0200-...)

4) Backstop

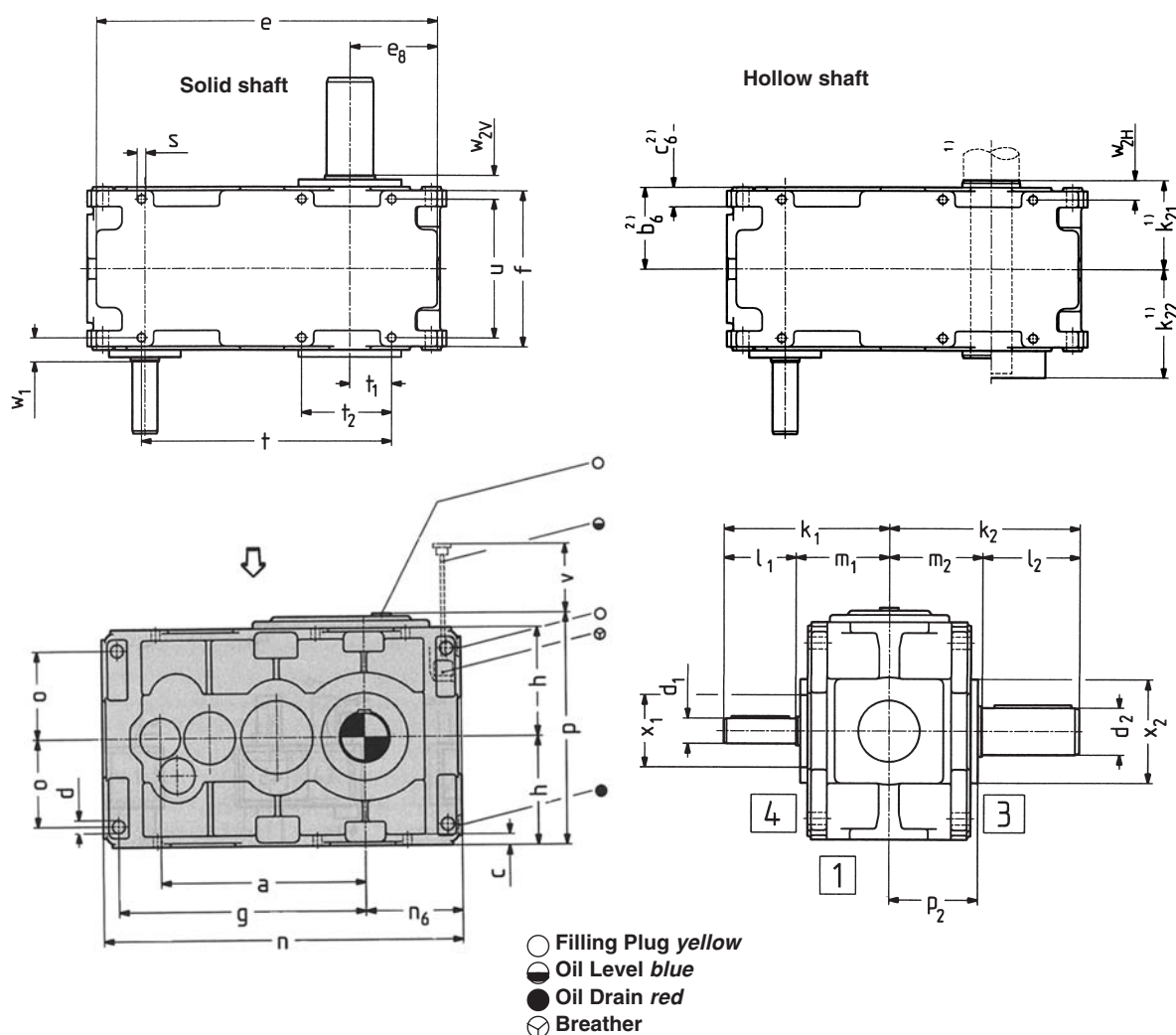
K	PD	50	-	R1	1	-	V	11	-	25	-	Z	1
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Example



Dimensions

Type PE 18-R1 ... PE 31-R1



Type	Input Shaft						Output Shaft					Weight [kg]	Oil filling [l]
	iN	Ø d ₁ k ₆	k ₁	l ₁	m ₁	Ø x ₁	Ø d ₂ m ₆	k ₂	l ₂	m ₂	Ø x ₂		
PE 18	90... 315	25	227	72	155	-	95	350	170	180	-	235	15
PE 20	125...450	25	227	72	155	-	120	370	190	180	-	325	20
PE 22	71... 200	35	307	100	207	-	130	405	190	215	-	445	28
	224...450	30											
PE 25	90... 250	35	307	100	207	-	145	450	230	220	296	580	36
	280...560	30											
PE 28	71... 450	35	319	100	219	-	160	480	230	250	328	740	48
PE 31	100...630	35	319	100	219	-	175	540	290	250	348	1035	66

Tapped centre holes in shaft ends DIN 332 Form DS		
d ₁ , d ₂		
25...30	35	> 85
M 10	M 12	M 24

Keys to DIN 6885/1 supplied by ELECON

Type of protection as per IP 55

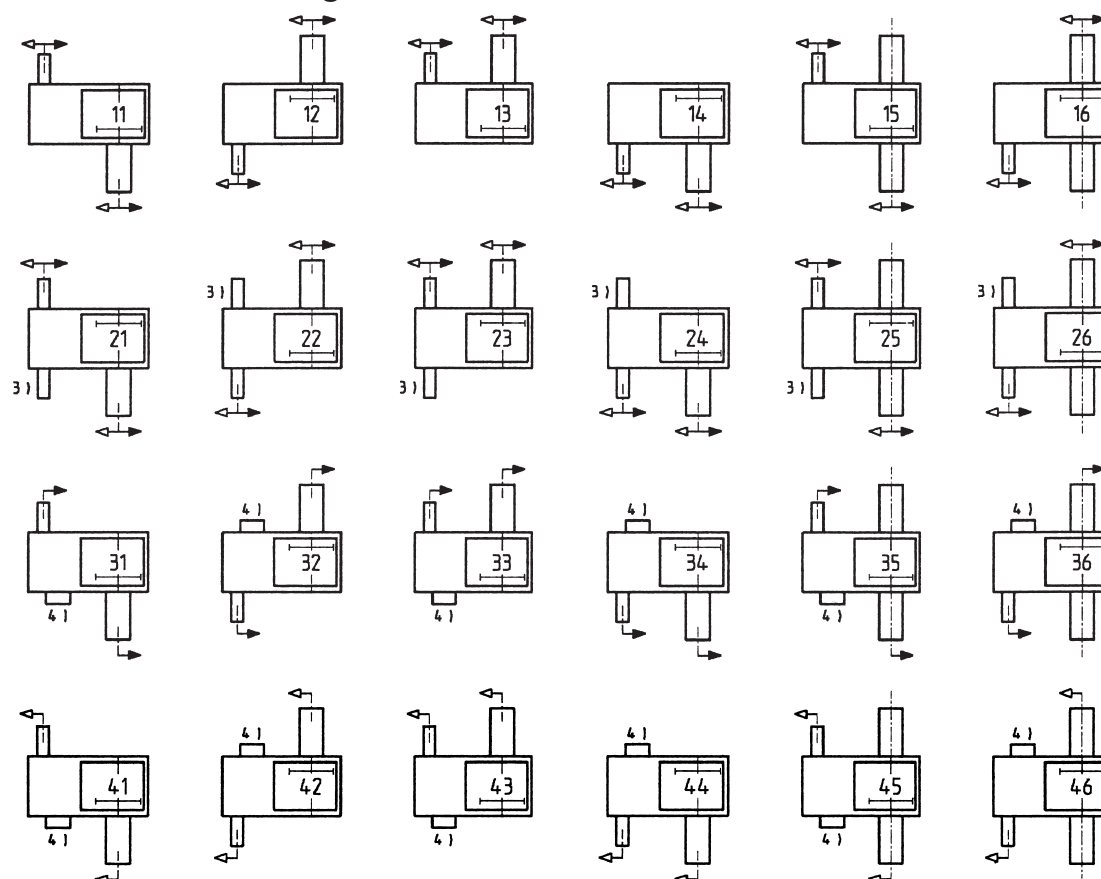
Type	a	b ₆ -0.2	c	c ₆	Ø d _{H9}	e	e ₈	f	g	h -0.2	n	n ₆	o	p	p ₂	Fitting		t	t ₁	t ₂	u	v	w ₁	w _{2v}	w _{2H}
																Ø s	d _s x l _{max}								
PE 18	387	147	18	32	22	622	155	284	458	190	654	171	155	419	-	14.5	M12x55	486	87	175	248	30	31	56	33
PE 20	441	147	18	32	22	732	211	284	511	225	764	227	190	489	-	14.5	M12x90	596	143	285	248	55	31	56	33
PE 22	492	179	24	41	26	782	193	346	580	235	826	215	190	513	-	18.5	M16x65	622	113	226	306	45	54	62	36
PE 25	550	179	24	41	26	896	249	346	638	265	940	271	220	573	204	18.5	M16x90	736	169	340	306	85	54	67	62
PE 28	591	210	28	48	33	948	230	408	706	280	1000	256	227	610	246	24	M20x80	752	132	265	360	50	39	70	70
PE 31	659	210	28	48	33	1085	299	408	773	315	1137	325	262	680	239	24	M20x110	889	201	402	360	60	39	70	70

1) Hollow shaft and machine shaft see dimensions 900-0212-MB 1 and 900-0213-MB1

2) Torque arms see dimensions 900-0253-MB1

Location of input and output shafts

Directions of rotation viewing ↷

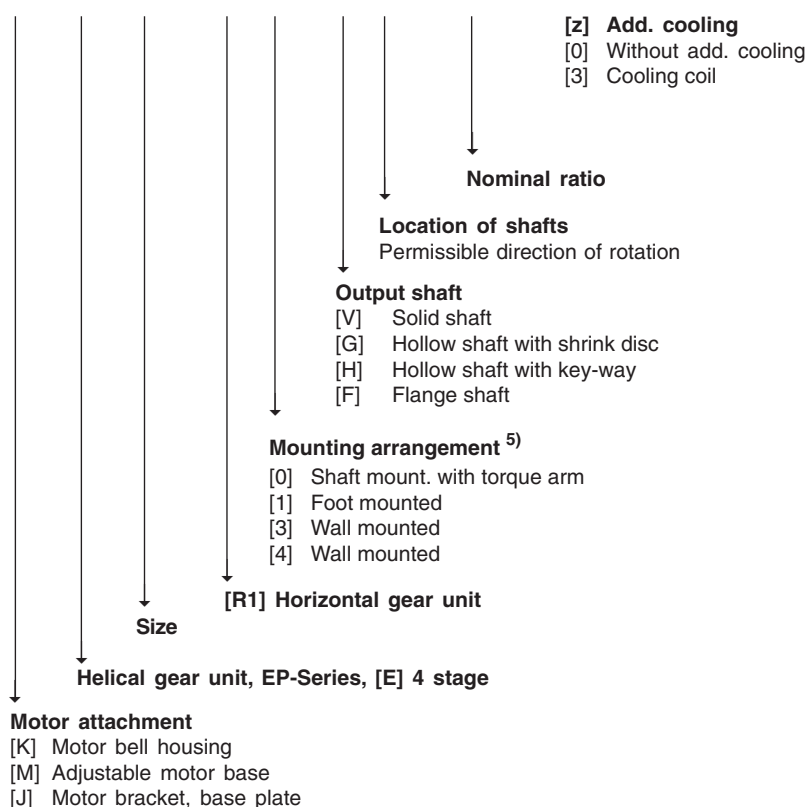


3) Add. shaft extension or double ext. shaft (900-0200-...)

4) Backstop

K	PE	22	-	R1	3	-	V	11	-	250	-	Z	3
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Example

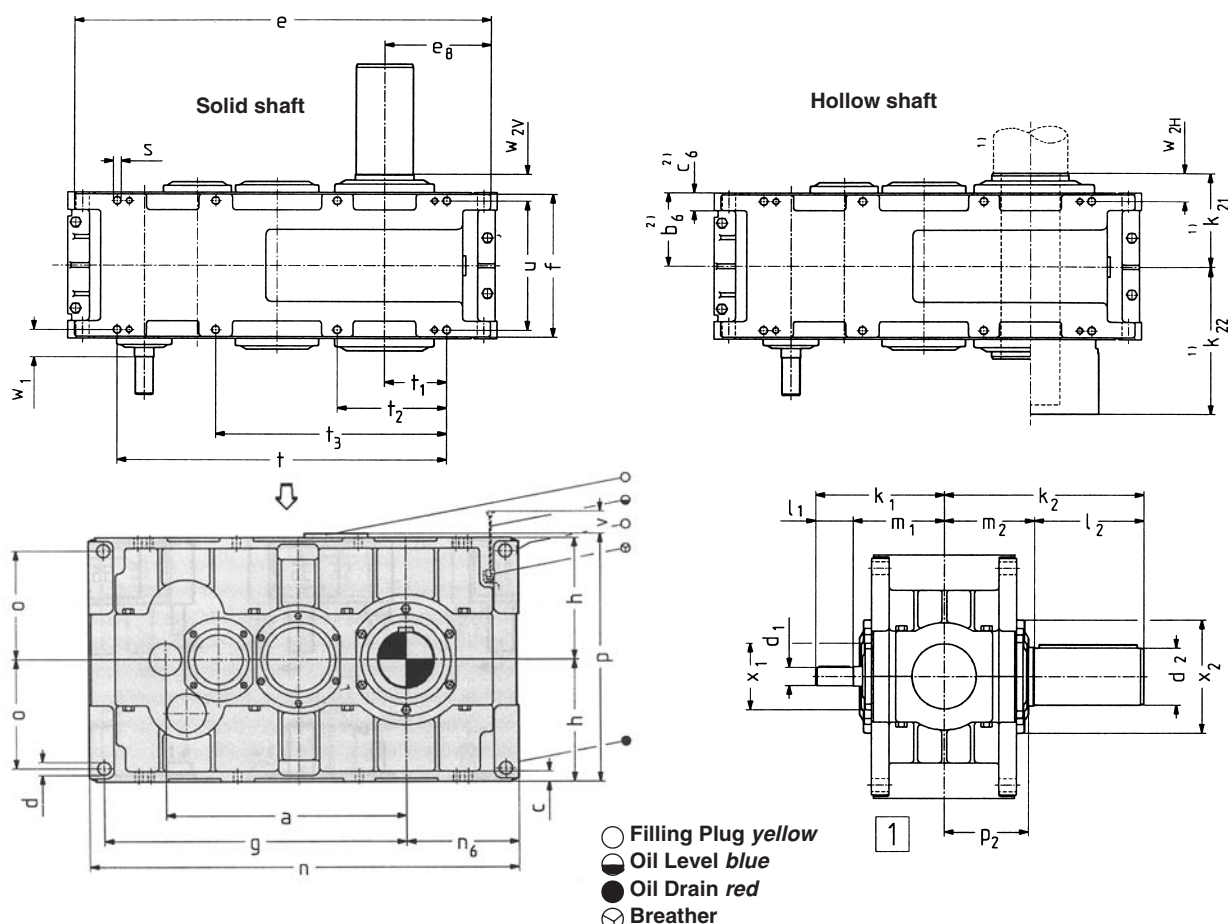


5) See dimension sheet 900-0220-MB9

Dimensions

3.99

Type PE 35-R1 ... PE 67-R1



d1, d2	40...50	70	≥ 155
Tapped centre holes in shaft ends DIN 332 Form DS	M16	M20	M24

Keys to DIN 6885/1 supplied by ELECON

Type of protection as per IP 55

Type	Input Shaft										Output Shaft					Weight [kg]	Oil filling [l]
	iN	Ø d ₁ k ₆	k ₁	l ₁	iN	Ø d ₁ k ₆	k ₁	l ₁	m ₁	Ø x ₁	Ø d ₂ m ₆	k ₂	l ₂	m ₂	Ø x ₂		
PE 35	71...200	50	380	120	224...450	40	380	120	260	--	155	570	290	280	328	1490	65
PE 40	100...280	50	380	120	315...630	40	380	120	260	-	175	570	290	280	348	1820	85
PE 42	71...450	45	412	107	--	--	--	--	305	--	195	650	330	320	400	2200	110
PE 45	90...560	45	412	107	--	--	--	--	305	--	210	730	410	320	440	2750	150
PE 47	112...710	45	412	107	--	--	--	--	305	--	230	730	410	320	440	3300	200
PE 50	71...450	70 m ₆	510	145	--	--	--	--	365	--	250	795	410	385	480	4100	200
PE 53	90...560	70 m ₆	510	145	--	--	--	--	365	--	250	795	410	385	480	4750	260
PE 56	100...630	70 m ₆	510	145	--	--	--	--	365	--	270	845	460	385	540	5800	370
PE 60	71...450	80 m ₆	610	170	--	--	--	--	440	--	290	920	460	460	540	6800	390
PE 63	80...500	80 m ₆	610	170	--	--	--	--	440	--	310	970	510	460	580	7800	480
PE 67	100...630	80 m ₆	610	170	--	--	--	--	440	--	310	970	510	460	580	8900	580

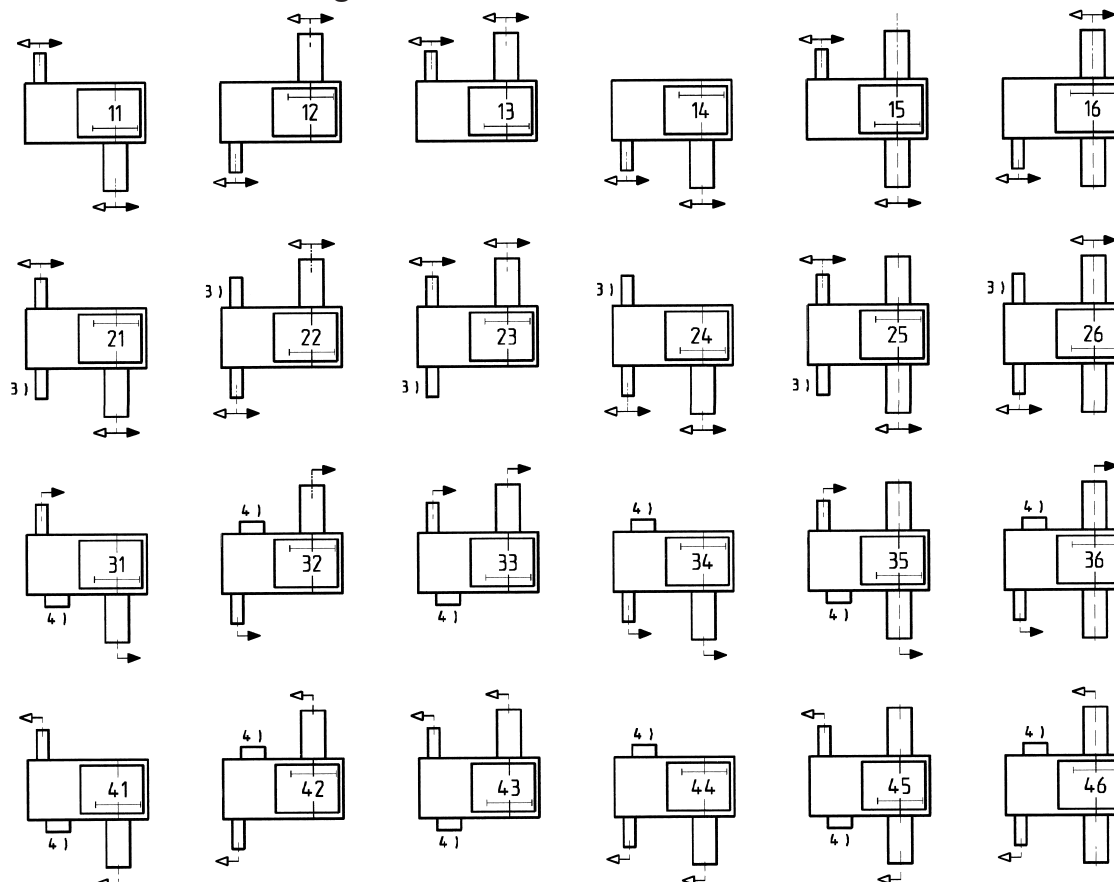
Type	a	b6	c	c6	Ø dH9	e	es	f	g	h -0.2	n	n6	o	p	p2	Ø s	Fitting ds x lmax	t	t1	t2	t3	u	v	w1	w2v	w2H
PE 35	734	225	32	55	40	1275	325	438	925	300	1315	345	255	610	262	24	M20x85	1005	190	325	695	396	190	62	82	87
PE 40	811	225	32	55	40	1430	403	438	1002	375	1470	423	330	760	262	24	M20x120	1157	265	477	847	396	220	62	82	87
PE 42	894	265	40	62	45	1555	392	514	1134	355	1615	422	305	720	303	28	M24x100	1230	225	390	820	460	250	42	90	85
PE 45	960	265	40	62	45	1689	460	514	1200	425	1749	490	375	860	303	28	M24x120	1356	285	516	946	460	250	42	90	90
PE 47	1046	265	40	62	52	1860	545	514	1285	500	1920	575	440	1010	303	28	M24x250	1527	370	687	1117	460	250	42	90	100
PE 50	1104	320	50	75	60	1892	470	620	1392	425	1962	505	360	860	358	35	M30x120	1524	280	504	1014	560	250	85	105	110
PE 53	1175	320	50	75	60	2038	545	620	1463	500	2108	580	435	1010	358	35	M30x180	1670	355	650	1160	560	250	85	105	110
PE 56	1268	320	50	75	60	2231	645	620	1556	600	2301	680	535	1210	365	35	M30x250	1858	450	838	1348	560	250	85	105	110
PE 60	1334	395	60	90	65	2272	565	770	1669	530	2342	600	460	1070	440	42	M36x150	1840	345	630	1200	690	350	95	115	120
PE 63	1407	395	60	90	65	2420	640	770	1742	600	2490	675	530	1210	440	42	M36x200	1988	420	778	1348	690	350	95	115	120
PE 67	1478	395	60	90	70	2566	715	770	1806	670	2636	750	590	1350	440	42	M36x250	2134	495	924	1494	690	350	95	115	120

1) Hollow shaft and machine shaft see dimensions 900-0212-MB 1 and 900-0213-MB1

2) Torque arms see dimensions 900-0253-MB1

Location of input and output shafts (upto size 47)

Directions of rotation viewing ↷

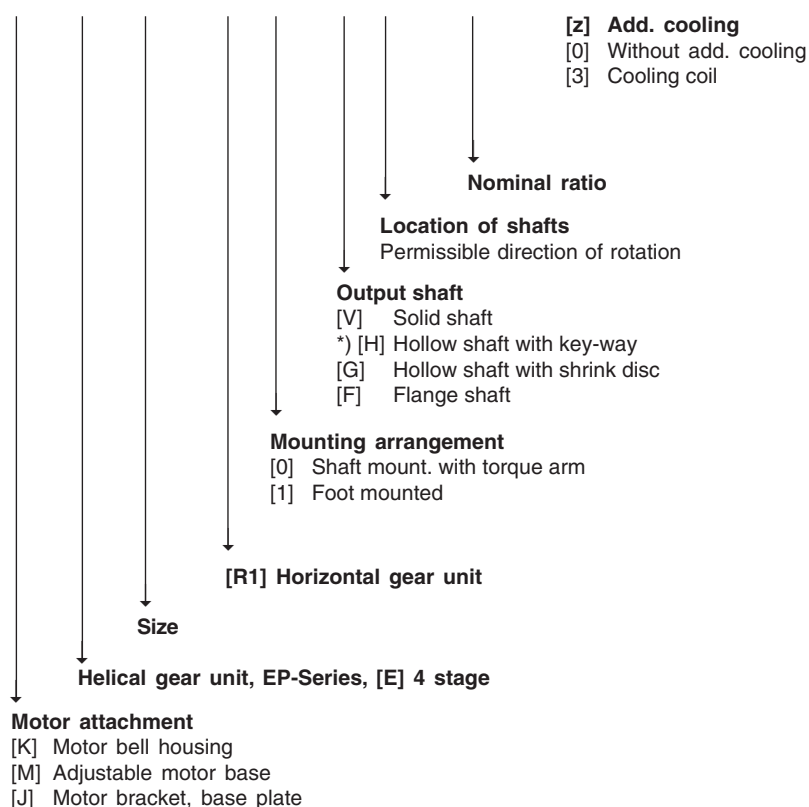


3) Add. shaft extension or double ext. shaft (900-0200-...)

4) Backstop

K	PE	35	-	R1	1	-	V	11	-	250	-	Z	3
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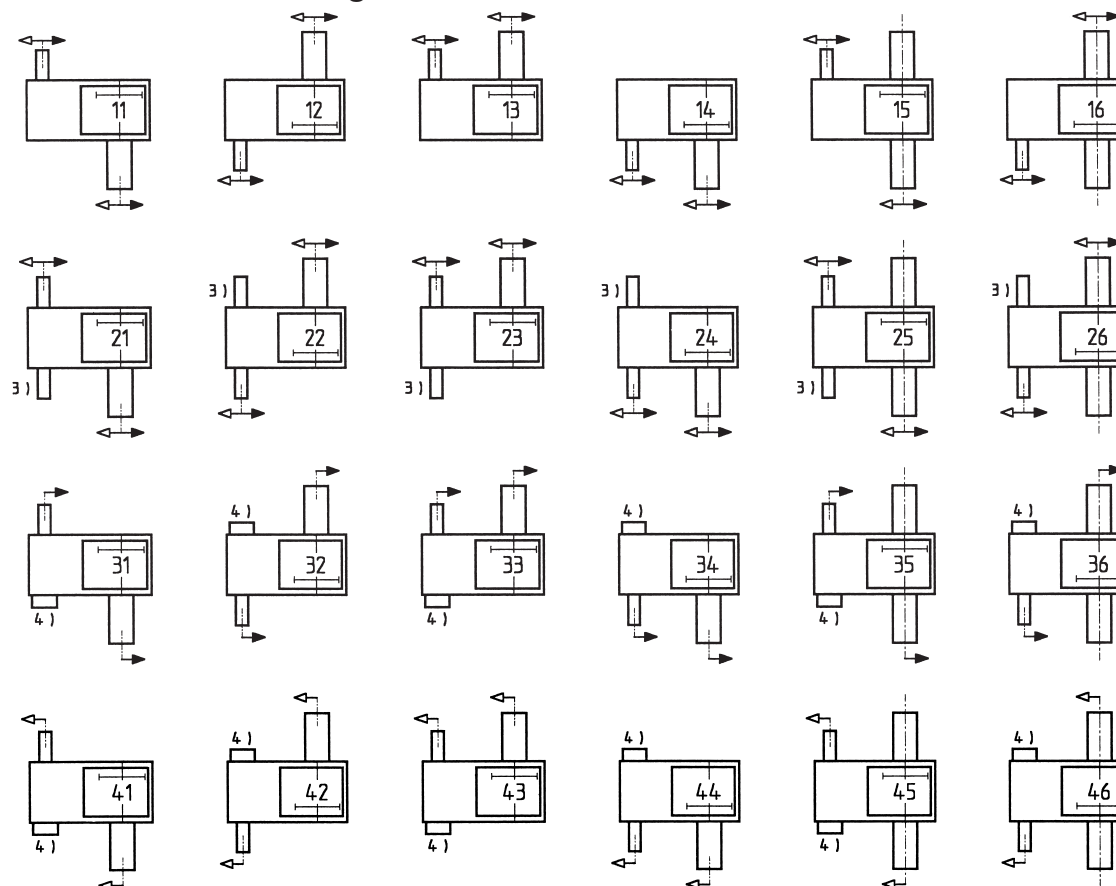
Example



*) Only types PE35 and PE 40

Location of input and output shafts (from size 50)

Directions of rotation viewing ↷

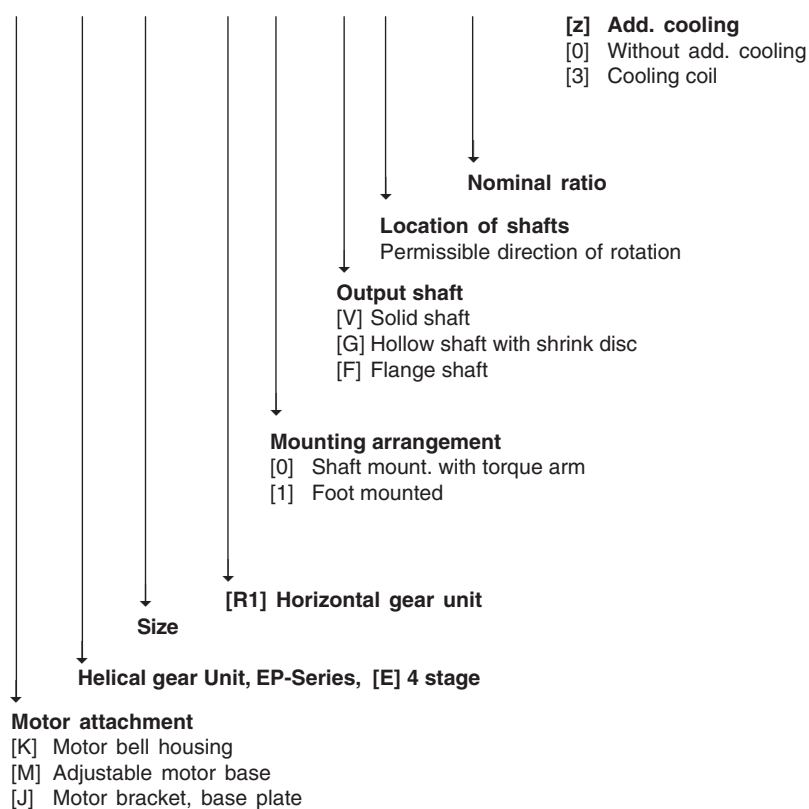


3) Add. shaft extension or double ext. shaft (900-0200-...)

4) Backstop

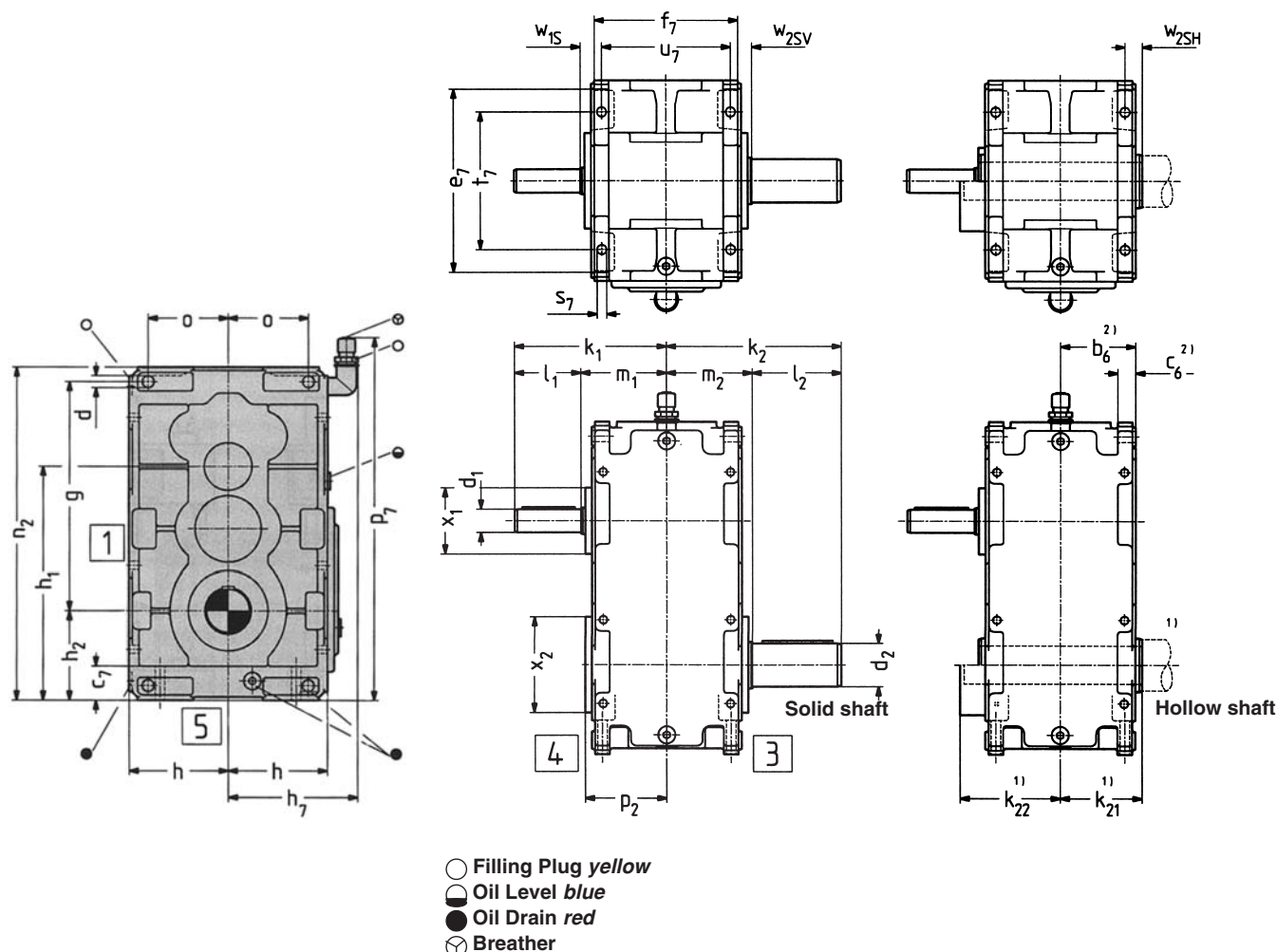
K	PE	50	-	R1	1	-	V	11	-	250	-	Z	3
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Example



Dimensions

Type PC 14-S5 ... PC 31-S5



Type	Input shaft					Output shaft					Weight [kg]	Oil filling [l]
	Ø d ₁	k ₁	l ₁	m ₁	Ø x ₁	Ø d ₂ m ₆	k ₂	l ₂	m ₂	Ø x ₂		
PC 14	35 k ₆	218	100	118	-	65	270	135	135	-	105	10
PC 16	35 k ₆	218	100	118	-	85	290	145	145	-	155	16
PC 18	45 k ₆	275	120	155	-	95	350	170	180	-	225	25
PC 20	45 k ₆	275	120	155	-	120	370	190	180	-	310	33
PC 22	60 m ₆	337	140	197	195	130	405	190	215	-	420	45
PC 25	60 m ₆	337	140	197	195	145	450	230	220	296	555	60
PC 28	70 m ₆	369	140	229	205	160	480	230	250	328	705	75
PC 31	70 m ₆	369	140	229	205	175	540	290	250	348	995	108

d ₁ , d ₂	35	45	60...85	> 85
Tapped centre holes in shaft ends DIN 332 Form DS	M 12	M 16	M 20	M 24

Keys to DIN 6885/1 supplied by ELECON

Type of protection as per IP 55

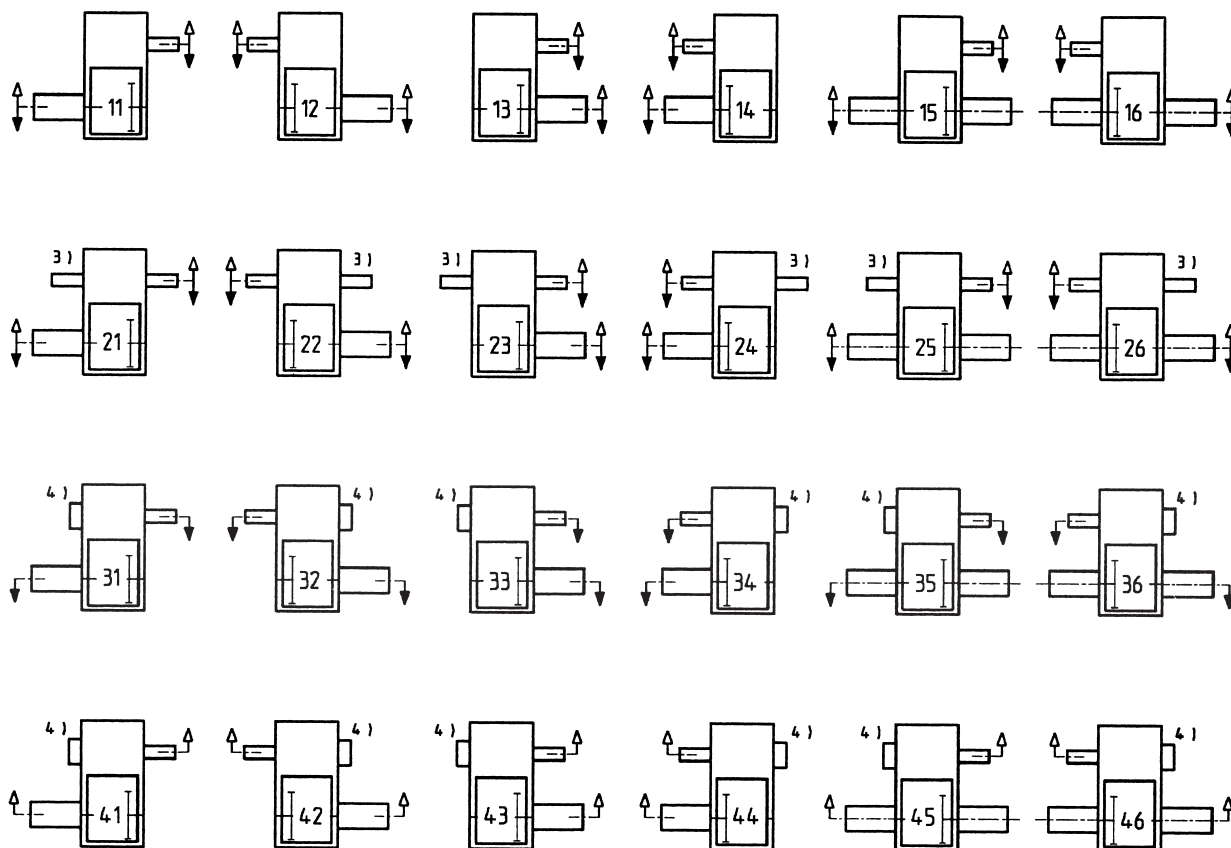
Type	b ₆ -0.2	c ₆	c ₇	Ø d H ₉	e ₇	f ₇	g	h -0.2	h ₁	h ₂ -0.2	h ₇	n ₂	o	p ₂	p ₇	Fitting		t ₇	u ₇	w _{1s}	w _{2SV}	w _{2SH}
																Ø s ₇	d _s x l _{max}					
PC 14	113	27	51	16	274	216	344	150	350	134	195	500	121	-	535	14.5	M12x90	206	194	21	38	26
PC 16	113	27	51	16	334	216	400	180	455	183	225	605	151	-	640	14.5	M12x90	266	194	21	48	26
PC 18	147	32	62	22	348	284	458	190	464	171	245	654	155	-	690	16.5	M14x100	260	258	26	51	28
PC 20	147	32	62	22	414	284	511	225	574	227	280	764	190	-	795	16.5	M14x100	330	258	26	51	28
PC 22	179	41	76	26	426	346	580	235	591	215	305	826	190	-	865	24	M20x130	326	312	41	59	33
PC 25	179	41	77	26	486	346	638	265	705	271	335	940	220	204	980	24	M20x130	384	312	41	64	59
PC 28	210	48	86	33	504	408	706	280	720	256	360	1000	227	246	1030	28	M24x150	386	366	46	67	67
PC 31	210	48	95	33	574	408	773	315	857	325	395	1137	262	239	1165	28	M24x160	456	366	46	67	67

1) Hollow shaft and machine shaft see dimensions 900-0212-MB 1 and 900-0213-MB1

2) Torque arms see dimensions 900-0253-MB1

Location of input and output shafts

Directions of rotation viewing ⇄

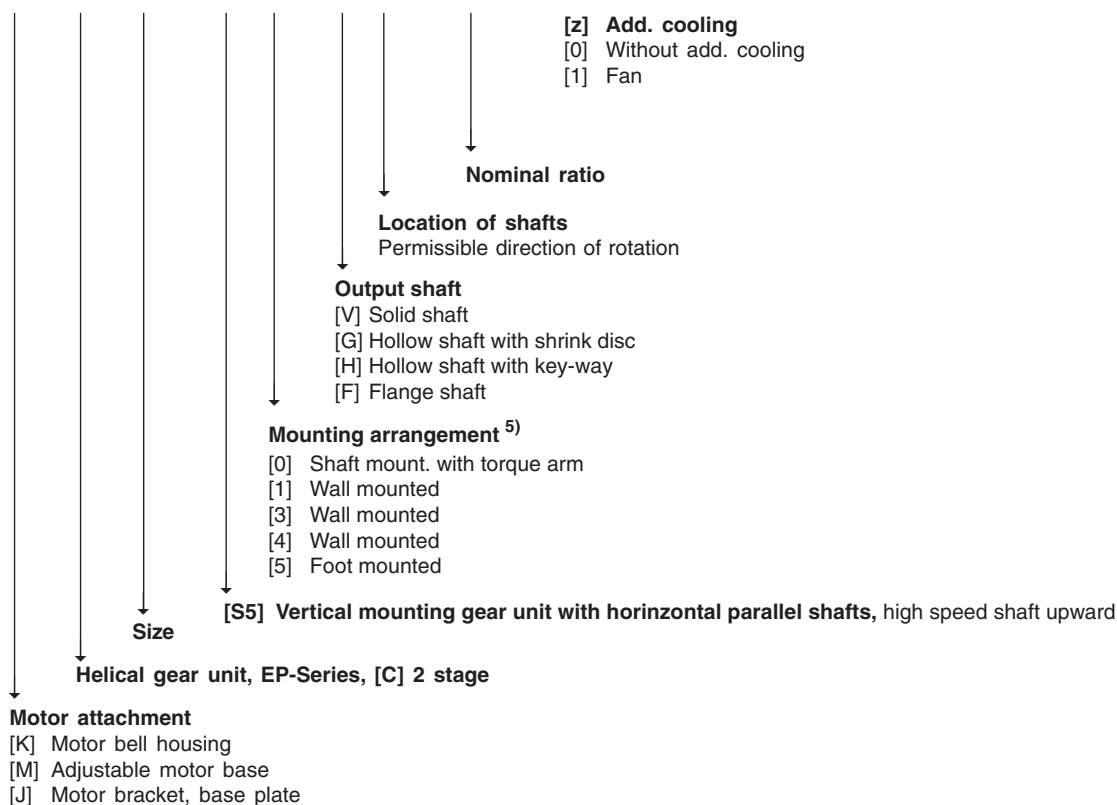


3) Add. shaft extension or double ext. shaft (900-0200-...)

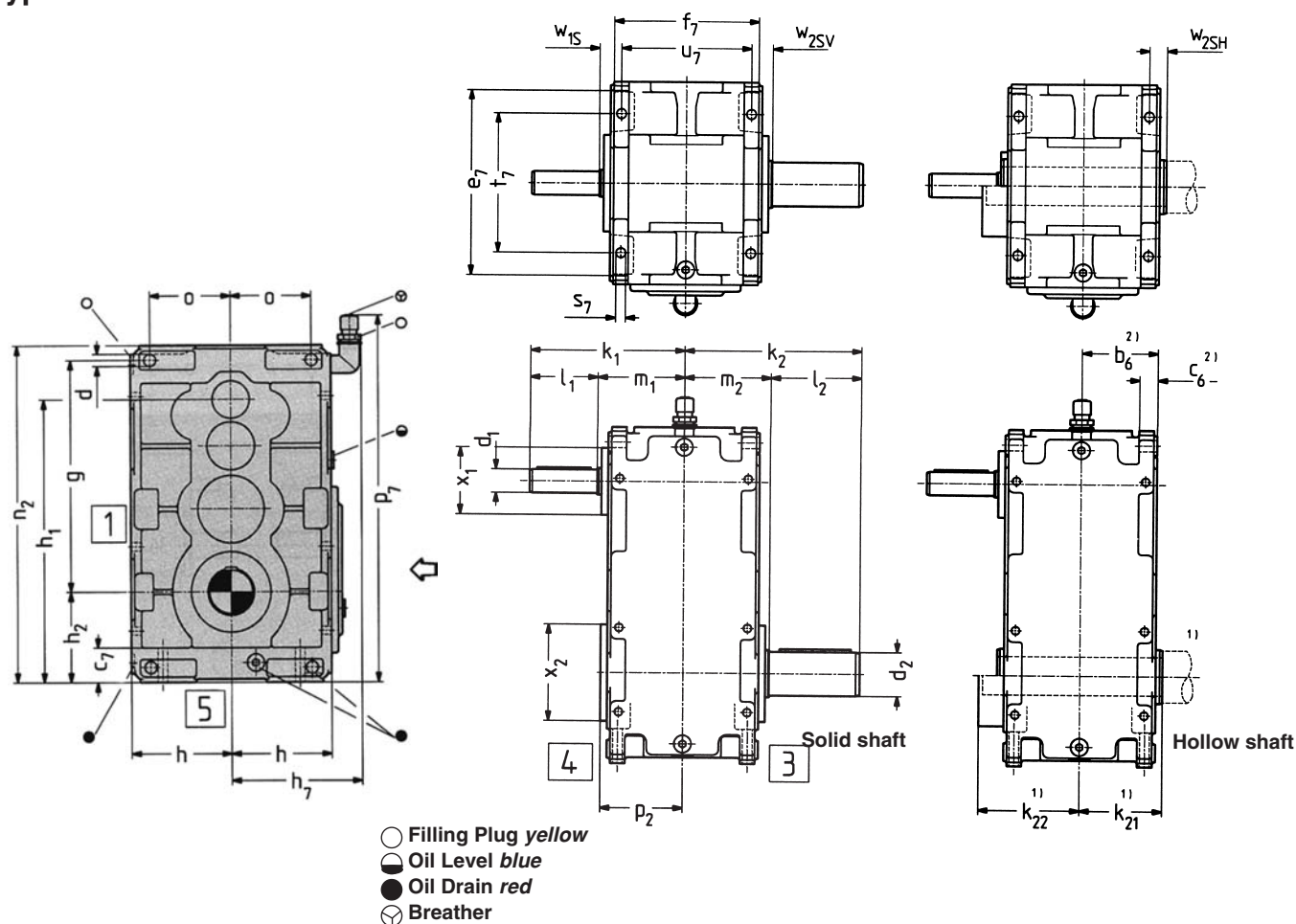
4) Backstop

K	PC	22	-	S5	4	-	V	11	-	14	-	Z	1
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Example



5) See dimension sheet 900-0220-MB9

Type
PD 14-S5 ... PD 31-S5


Type	Input shaft						Output shaft					Weight [kg]	Oil filling [l]
	in	Ø d ₁ k ₆	k ₁	l ₁	m ₁	Ø x ₁	Ø d ₂ m ₆	k ₂	l ₂	m ₂	Ø x ₂		
PD 14	20...71	25	203	82	121	-	65	270	135	135	-	110	12
PD 16	31.5...112						85	290	145	145		160	19
PD 18	16...45	35	283	100	183	-	95	350	170	180	-	230	30
	50...100	30											
PD 20	22.4...63	35	283	100	183	-	120	370	190	180	-	320	40
	71...140	30											
PD 22	20...45	50	347	120	227	130	130	405	190	215	-	440	55
	50...71	40											
PD 25	25...56	50	347	120	227	130	145	450	230	220	296	575	74
	63...90	40											
PD 28	16...45	50	362	120	242	-	160	480	230	250	328	725	92
	50...100	40											
PD 31	22.4...63	50	362	120	242	-	175	540	290	250	348	1015	130
	71...140	40											

Tapped centre holes in shaft ends DIN 332 Form DS				
d ₁ , d ₂				
25...30	35	40...50	65...85	> 85
M 10	M 12	M 16	M 20	M 24

Keys to DIN 6885/1 supplied by ELECON

Type of protection as per IP 55

Type	b6 -0.2	c6	c7	Ø dH9	e7	f7	g	h -0.2	h1	h2 -0.2	h7	n2	o	p2	p7	Fitting		t7	u7	w1s	w2SV	w2SH
	Ø s7		ds x lmax																			
PD 14	113	27	51	16	274	216	344	150	419	134	195	500	121	-	535	14.5	M12x90	206	194	24	38	26
PD 16	113	27	51	16	334	216	400	180	524	183	225	605	151	-	640	14.5	M12x90	266	194	24	48	26
PD 18	147	32	62	22	348	284	458	190	558	171	245	654	155	-	690	16.5	M14x100	260	258	54	51	28
PD 20	147	32	62	22	414	284	511	225	668	227	280	764	190	-	795	16.5	M14x100	330	258	54	51	28
PD 22	179	41	76	26	426	346	580	235	707	215	305	826	190	-	865	24	M20x130	326	312	71	59	33
PD 25	179	41	77	26	486	346	638	265	821	271	335	940	220	204	980	24	M20x130	384	312	71	64	59
PD 28	210	48	86	33	504	408	706	280	847	256	360	1000	227	246	1030	28	M24x150	386	366	59	67	67
PD 31	210	48	95	33	574	408	773	315	984	325	395	1137	262	239	1165	28	M24x160	456	366	59	67	67

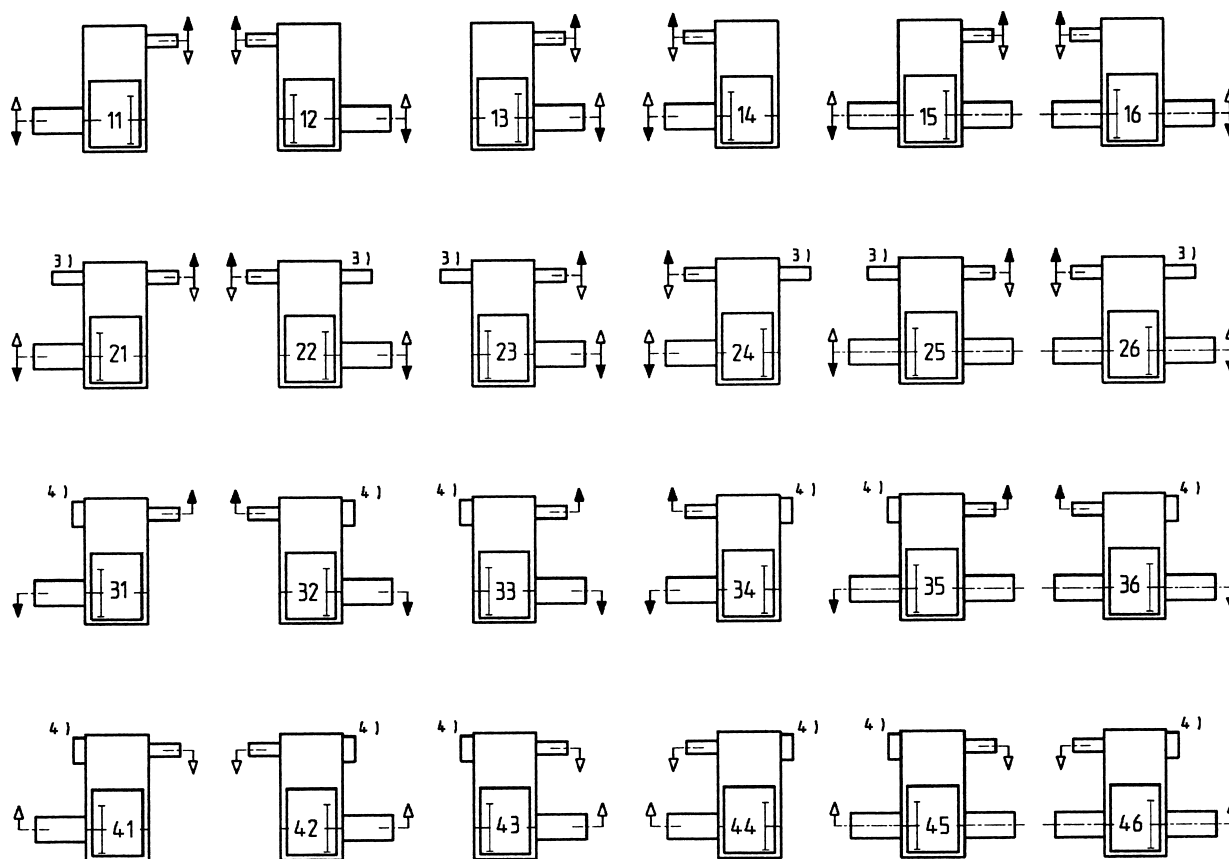
1) Hollow shaft and machine shaft see dimensions 900-0212-MB 1 and 900-0213-MB1

2) Torque arms see dimensions 900-0253-MB1

Location of input and output shafts

3.99

Directions of rotation viewing ⇄

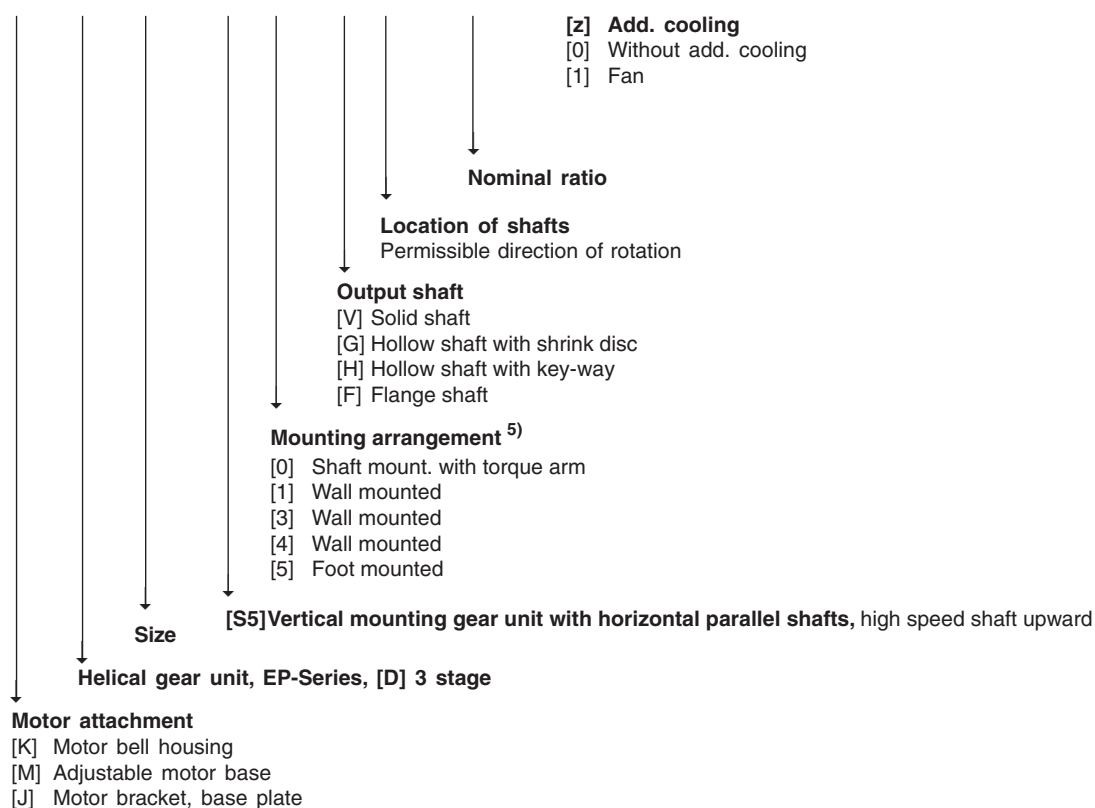


3) Add. shaft extension or double ext. shaft (900-0200-...)

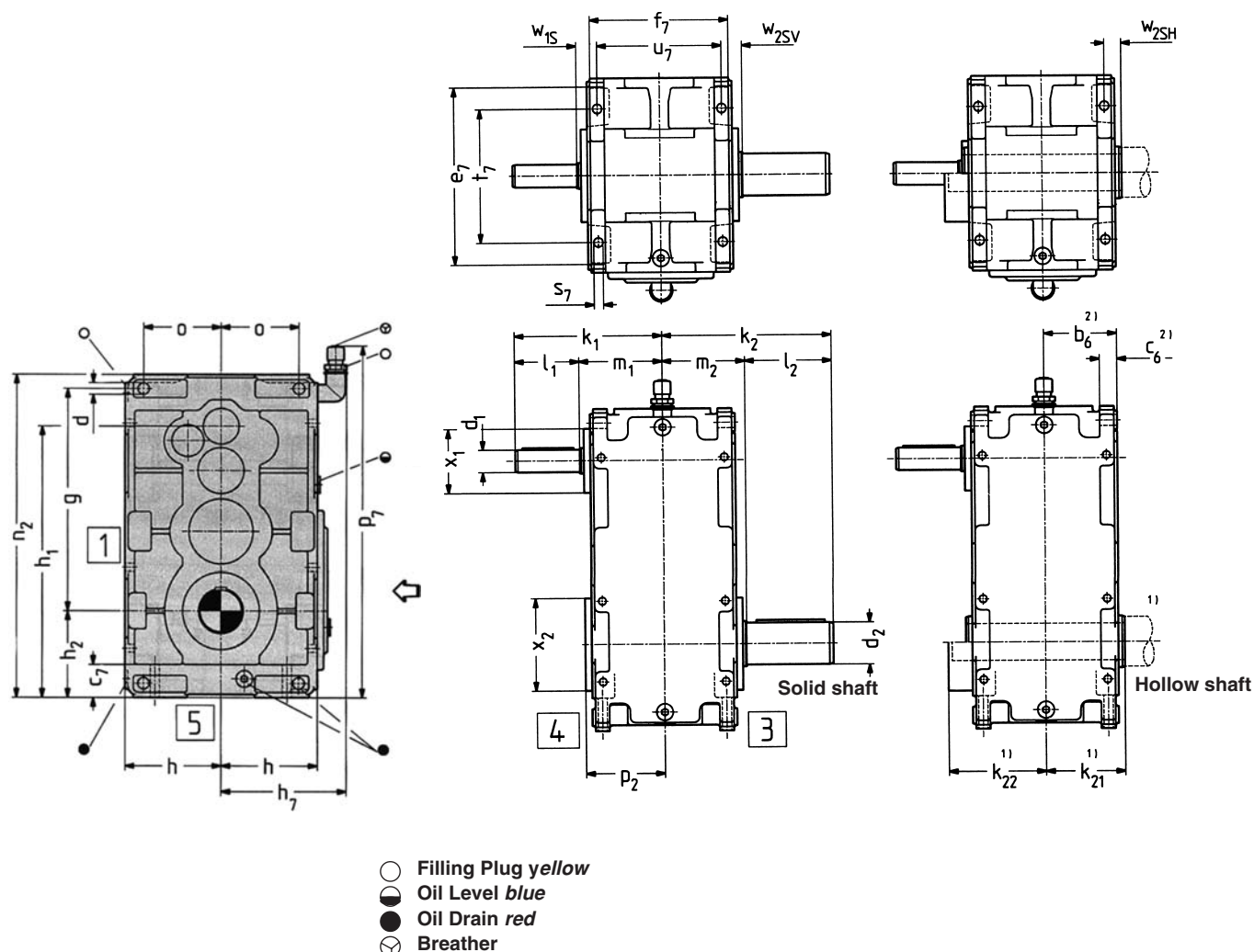
4) Backstop

K	PD	22	-	S5	3	-	V	11	-	25	-	Z	1
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Example



5) See dimension sheet 900-0220-MB9

Type PE 18-S5 ... PE 31-S5


Type	Input shaft						Output shaft					Weight [kg]	Oil filling [l]
	in	Ø d1 k6	k1	l1	m1	Ø x1	Ø d2 m6	k2	l2	m2	Ø x2		
PE 18	90...315	25	227	72	155	-	95	350	170	180	-	235	31
PE 20	125...450	25	227	72	155	-	120	370	190	180	-	325	41
PE 22	71...200	35	307	100	207	-	130	405	190	215	-	445	57
	224...450	30											
PE 25	90...250	35	307	100	207	-	145	450	230	220	296	580	74
	280...560	30											
PE 28	71...450	35	319	100	219	-	160	480	230	250	328	740	96
PE 31	100...630	35	319	100	219	-	175	540	290	250	348	1035	134

Tapped centre holes in shaft ends DIN 332 Form DS		
d1, d2		
25...30	35	> 85
M 10	M 12	M 24

Keys to DIN 6885/1 supplied by ELECON

Type of protection as per IP 55

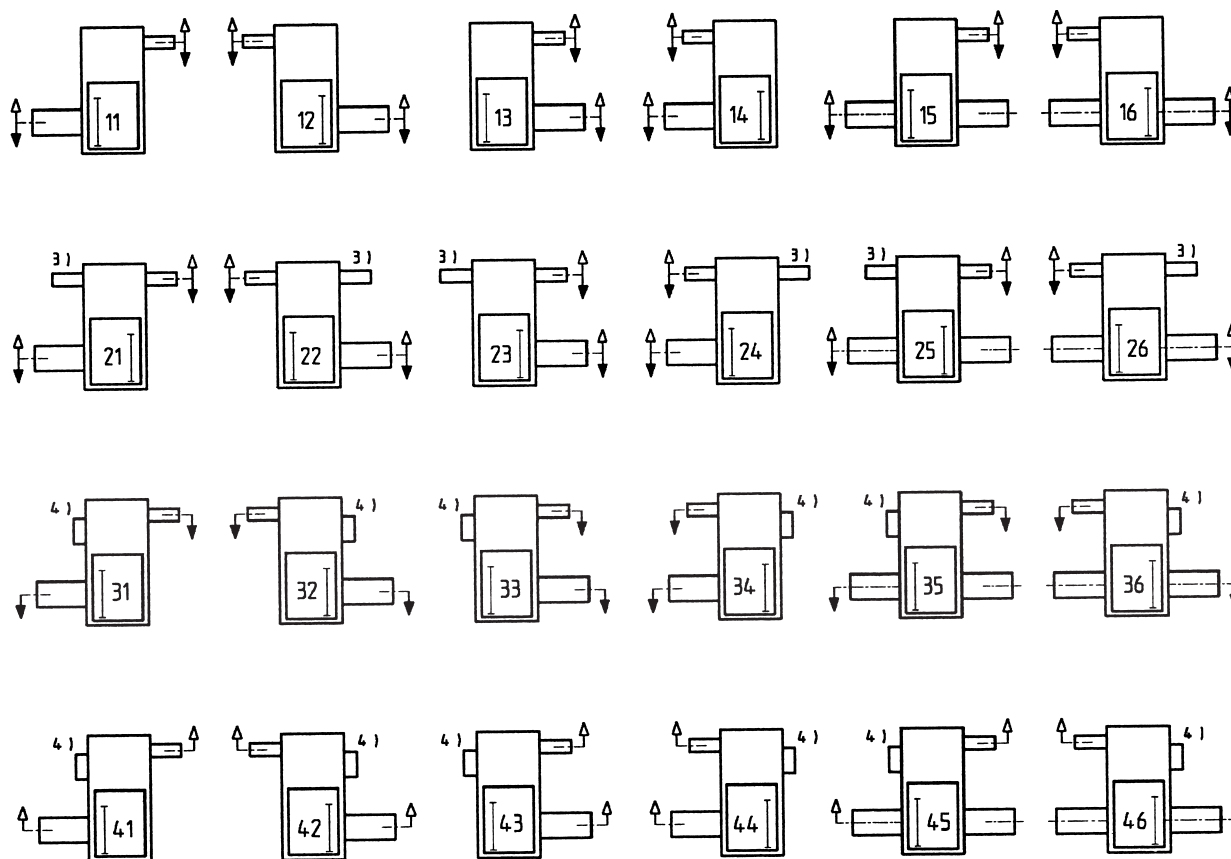
Type	b6 -0.2	c6	c7	Ø d H9	e7	f7	g	h -0.2	h1	h2 -0.2	h7	n2	o	p2	p7	Fitting		t7	u7	w1s	w2sv	w2SH
	Ø s7	ds	x	lmax																		
PE 18	147	32	62	22	348	284	458	190	558	171	245	654	155	-	690	16.5	M14x100	260	258	26	51	28
PE 20	147	32	62	22	414	284	511	225	668	227	280	764	190	-	795	16.5	M14x100	330	258	26	51	28
PE 22	179	41	76	26	426	346	580	235	707	215	305	826	190	-	865	24	M20x130	326	312	51	59	33
PE 25	179	41	77	26	486	346	638	265	821	271	335	940	220	204	980	24	M20x130	384	312	51	64	59
PE 28	210	48	86	33	504	408	706	280	847	256	360	1000	227	246	1030	28	M24x150	386	366	36	67	67
PE 31	210	48	95	33	574	408	773	315	984	325	395	1137	262	239	1165	28	M24x160	456	366	36	67	67

1) Hollow shaft and machine shaft see dimensions 900-0212-MB 1 and 900-0213-MB1

2) Torque arms see dimensions 900-0253-MB1

Location of input and output shafts

Directions of rotation viewing ⇄

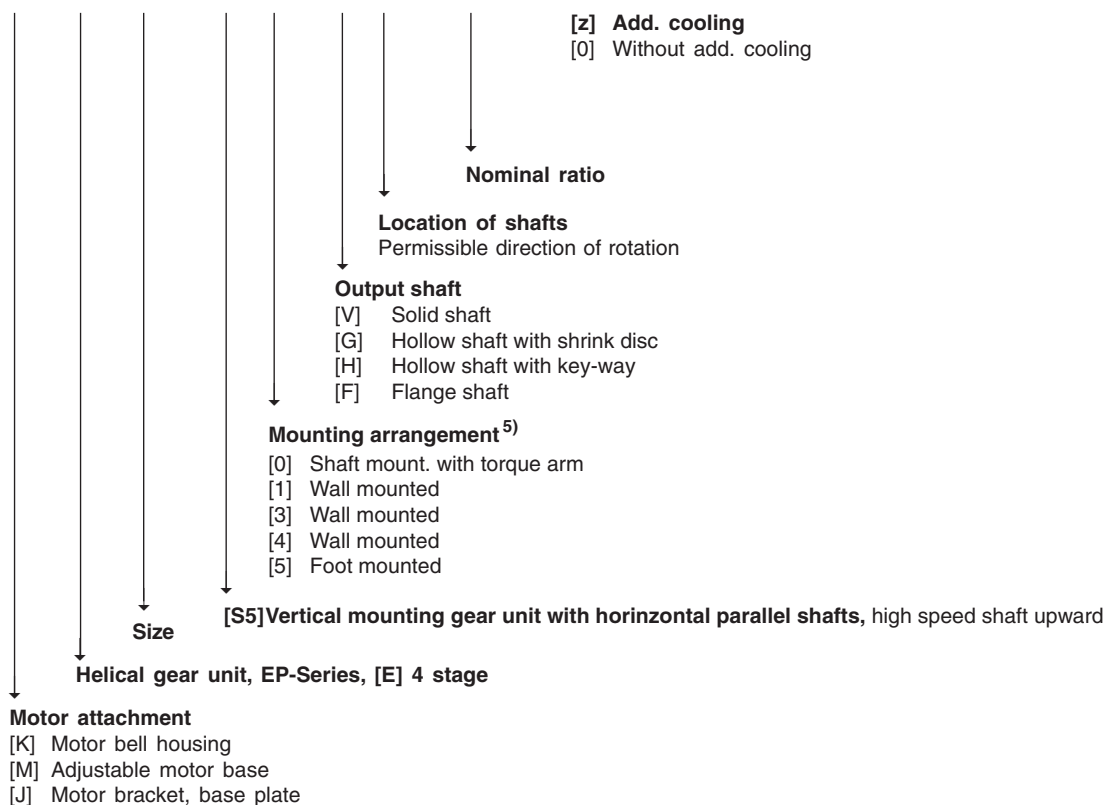


3) Add. shaft extension or double ext. shaft (900-0200-...)

4) Backstop

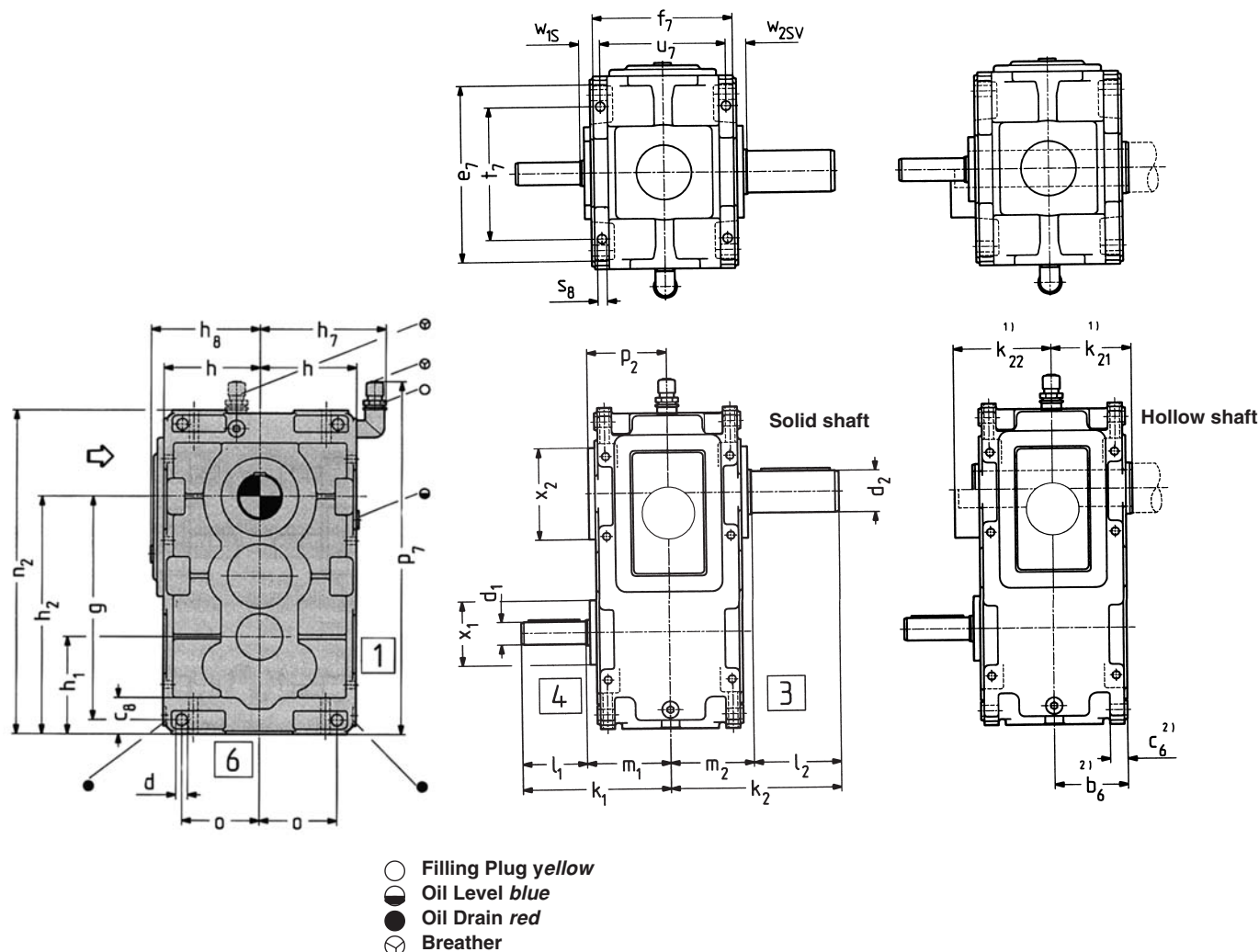
K	PE	22	-	S5	1	-	V	11	-	250	-	Z	0
---	----	----	---	----	---	---	---	----	---	-----	---	---	---

Example



5) See dimension sheet 900-0220-MB9

Type PC 14-T6 ... PC 31-T6



Type	Input shaft					Output shaft					Weight [kg]	Oil filling [l]
	Ø d1	k1	l1	m1	Ø x1	Ø d2 m6	k2	l2	m2	Ø x2		
PC 14	35 k6	218	100	118	-	65	270	135	135	-	105	10
PC 16	35 k6	218	100	118	-	85	290	145	145	-	155	15
PC 18	45 k6	275	120	155	-	95	350	170	180	-	225	25
PC 20	45 k6	275	120	155	-	120	370	190	180	-	310	31
PC 22	60 m6	337	140	197	195	130	405	190	215	-	420	47
PC 25	60 m6	337	140	197	195	145	450	230	220	296	555	58
PC 28	70 m6	369	140	229	205	160	480	230	250	328	705	80
PC 31	70 m6	369	140	229	205	175	540	290	250	348	995	125

d1, d2	35	45	60...85	> 85
Tapped centre holes in shaft ends DIN 332 Form DS	M 12	M 16	M 20	M 24

Keys to DIN 6885/1 supplied by ELECON

Type of protection as per IP 55

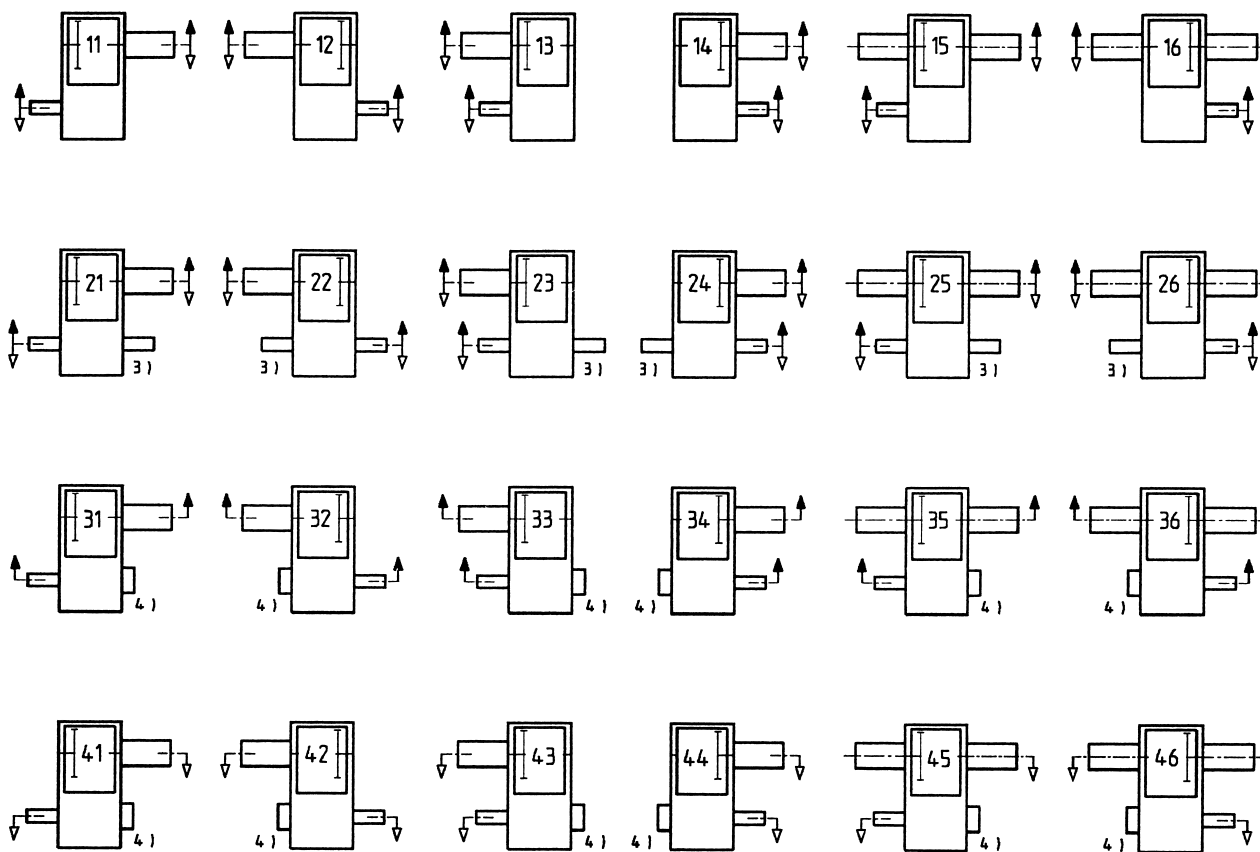
Type	b6 -0.2	c6	c8	Ø dH9	e7	f7	g	h -0.2	h1 -0.2	h2	h7	h8	n2	o	p2	p7	Fitting		t7	u7	w1s	w2SV	w2SH
																	Ø s8	dsxI max					
PC 14	113	27	57	16	274	216	344	150	150	366	195	183	500	121	-	535	14.5	M12x90	206	194	21	38	26
PC 16	113	27	57	16	334	216	400	180	150	422	225	213	605	151	-	640	14.5	M12x90	266	194	21	48	26
PC 18	147	32	64	22	348	284	458	190	190	483	245	229	654	155	-	690	16.5	M14x100	260	258	26	51	28
PC 20	147	32	64	22	414	284	511	225	190	537	280	264	764	190	-	795	16.5	M14x100	330	258	26	51	28
PC 22	179	41	76	26	426	346	580	235	235	611	305	278	826	190	-	865	24	M20x130	326	312	41	59	33
PC 25	179	41	77	26	486	346	638	265	235	669	335	308	940	220	204	980	24	M20x130	384	312	41	64	59
PC 28	210	48	92	33	504	408	706	280	280	744	360	330	1000	227	246	1030	28	M24x150	386	366	46	67	67
PC 31	210	48	95	33	574	408	773	315	280	812	395	365	1137	262	239	1165	28	M24x160	456	366	46	67	67

1) Hollow shaft and machine shaft see dimensions 900-0212-MB 1 and 900-0213-MB1

2) Torque arms see dimensions 900-0253-MB1

Location of input and output shafts

Directions of rotation viewing ⇄



3) Add. shaft extension or double ext. shaft (900-0200-...)

4) Backstop

Example

K PC 22 - T6 6 - V 11 - 11.2 - Z 1

[z] Add. cooling
[0] Without add. cooling
[1] Fan

Nominal ratio

Location of shafts
Permissible direction of rotation

Output shaft

[V] Solid shaft
[G] Hollow shaft with shrink disc
[H] Hollow shaft with key-way
[F] Flange shaft

Mounting arrangement ⁵⁾

[0] Shaft mount. with torque arm
[1] Wall mounted
[3] Wall mounted
[4] Wall mounted
[6] Foot mounted

[T6] Vertical mounting gear unit with horizontal parallel shafts, high speed shaft downward

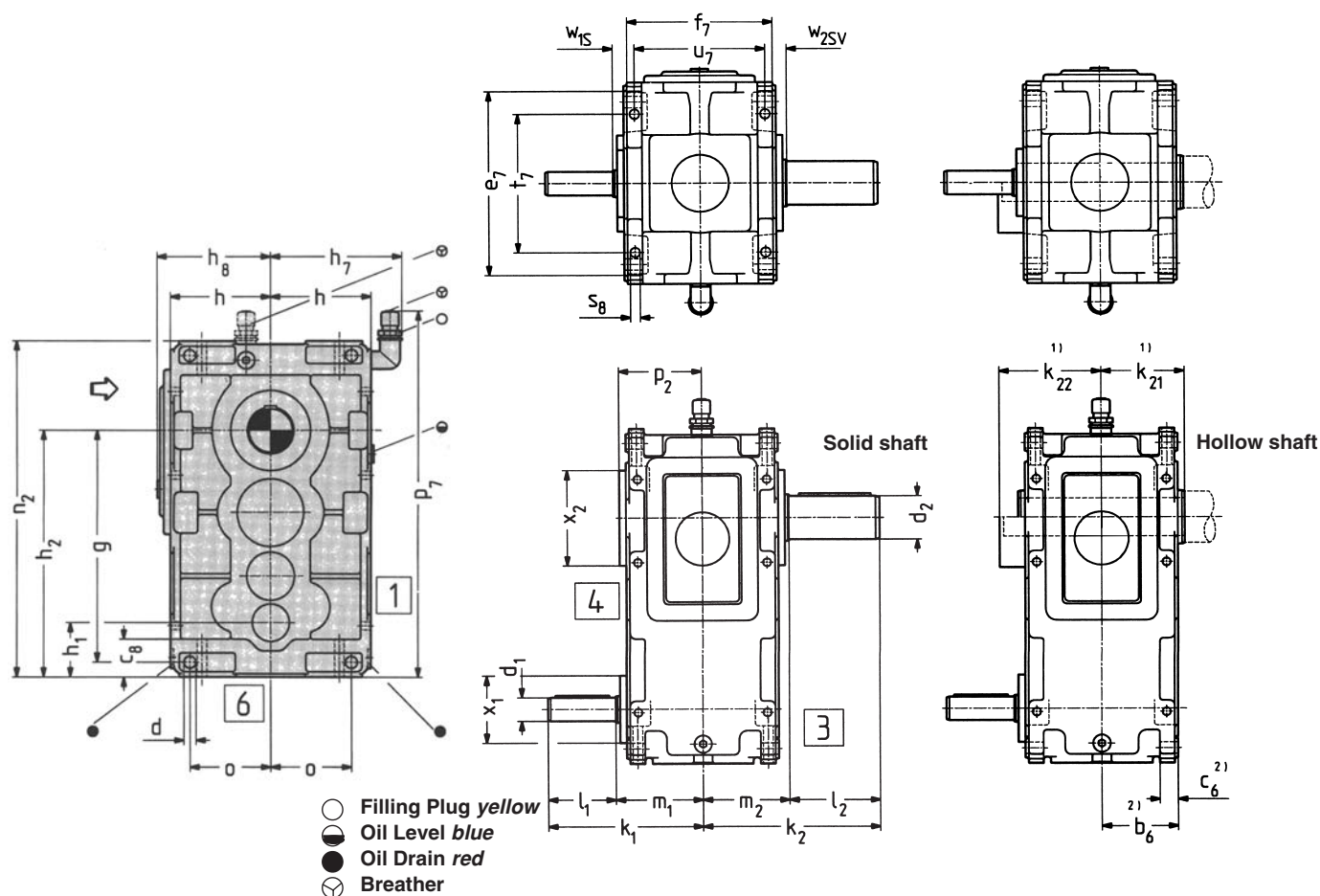
Size

Helical gear unit, EP-Series, [C] 2 stage

Motor attachment

[K] Motor bell housing
[M] Adjustable motor base
[J] Motor bracket, base plate

5) See dimension sheet 900-0220-MB9

Type
PD 14-T6 ... PD 31-T6


Type	Input shaft						Output shaft					Weight [kg]	Oil filling [l]
	i_N	$\varnothing d_1$ k_6	k_1	l_1	m_1	$\varnothing x_1$	$\varnothing d_2$ m_6	k_2	l_2	m_2	$\varnothing x_2$		
PD 14	20...71	25	203	82	121	-	65	270	135	135	-	110	9
PD 16	31.5...112	35	283	100	183	-	85	290	145	145	-	160	14
PD 18	16...45 50...100	35 30	283	100	183	-	95	350	170	180	-	230	24
PD 20	22.4...63 71...140	35 30	283	100	183	-	120	370	190	180	-	320	30
PD 22	20...45 50...71	50 40	347	120	227	130	130	405	190	215	-	440	46
PD 25	25...56 63...90	50 40	347	120	227	130	145	450	230	220	296	575	56
PD 28	16...45 50...100	50 40	362	120	242	-	160	480	230	250	328	725	77
PD 31	22.4...63 71...140	50 40	362	120	242	-	175	540	290	250	348	1015	100

Tapped centre holes in shaft ends DIN 332 Form DS				
d_1, d_2				
25...30	35	40...50	65...85	> 85
M 10	M 12	M 16	M 20	M 24

Keys to DIN 6885/1 supplied by ELECON

Type of protection as per IP 55

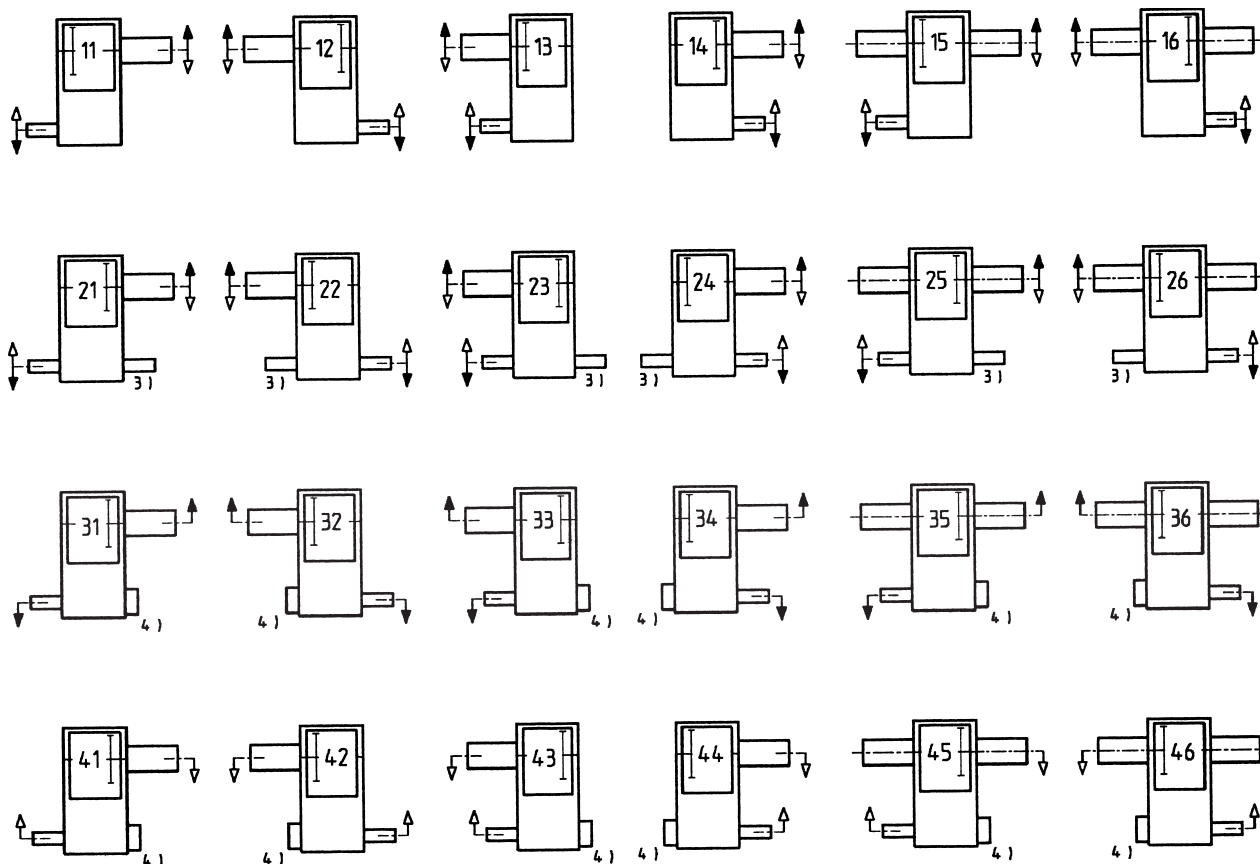
Type	b_6 -0.2	c_6	c_8	$\varnothing d$ H_9	e_7	f_7	g	h -0.2	h_1 -0.2	h_2	h_7	h_8	n_2	o	p_2	p_7	Fitting		t_7	u_7	w_{1S}	w_{2SV}	w_{2SH}
																	$\varnothing s_8$	$d_s \times l_{max}$					
PD 14	113	27	57	16	274	216	344	150	81	366	195	183	500	121	-	535	14.5	M12x90	206	194	24	38	26
PD 16	113	27	57	16	334	216	400	180	81	422	225	213	605	151	-	640	14.5	M12x90	266	194	24	48	26
PD 18	147	32	64	22	348	284	458	190	96	483	245	229	654	155	-	690	16.5	M14x100	260	258	54	51	28
PD 20	147	32	64	22	414	284	511	225	96	537	280	264	764	190	-	795	16.5	M14x100	330	258	54	51	28
PD 22	179	41	76	26	426	346	580	235	119	611	305	278	826	190	-	865	24	M20x130	326	312	71	59	33
PD 25	179	41	77	26	486	346	638	265	119	669	335	308	940	220	204	980	24	M20x130	384	312	71	64	59
PD 28	210	48	92	33	504	408	706	280	153	744	360	330	1000	227	246	1030	28	M24x150	386	366	59	67	67
PD 31	210	48	94	33	574	408	773	315	153	812	395	365	1137	262	239	1165	28	M24x160	456	366	59	67	67

1) Hollow shaft and machine shaft see dimensions 900-0212-MB 1 and 900-0213-MB1

2) Torque arms see dimensions 900-0253-MB1

Location of input and output shafts

Directions of rotation viewing ⇄



3) Add. shaft extension or double ext. shaft (900-0200-...)

4) Backstop

Example

K	PD	22	-	T6	6	-	V	11	-	25	-	Z	1
---	----	----	---	----	---	---	---	----	---	----	---	---	---

[z] Add. cooling
[0] Without add. cooling
[1] 1 Fan

Nominal ratio

Location of shafts
Permissible direction of rotation

Output shaft

[V] Solid shaft
[G] Hollow shaft with shrink disc
[H] Hollow shaft with key-way
[F] Flange shaft

Mounting arrangement ⁵⁾

[0] Shaft mount. with torque arm
[1] Wall mounted
[3] Wall mounted
[4] Wall mounted
[6] Foot mounted

[T6] Vertical mounting gear unit with horizontal parallel shafts, high speed shaft downward

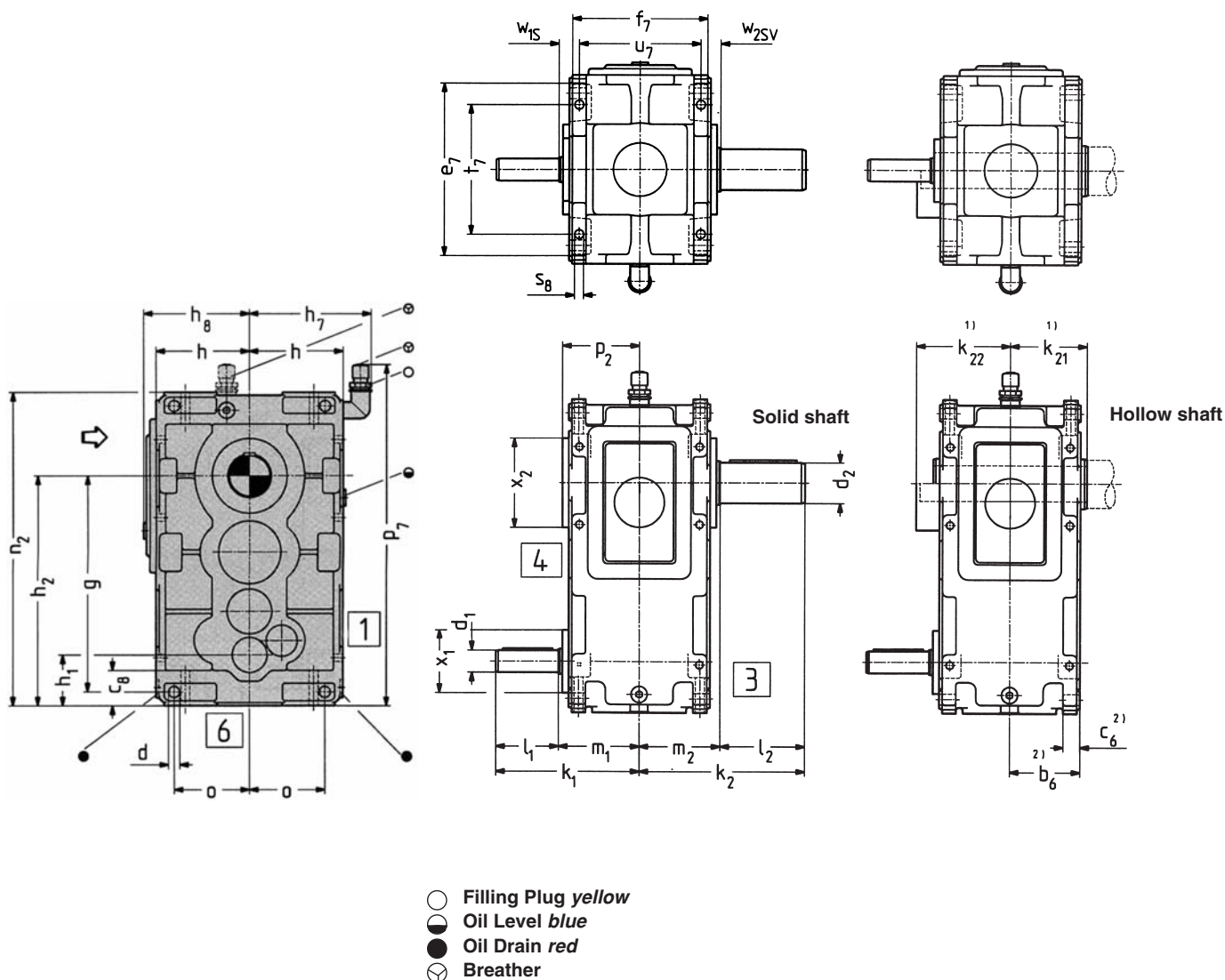
Size

Helical gear unit, EP-Series, [D] 3 stage

Motor attachment

[K] Motor bell housing
[M] Adjustable motor base
[J] Motor bracket, base plate

5) See dimension sheet 900-0220-MB9

Type
PE 18-T6 ... PE 31-T6


Type	Input shaft						Output shaft					Weight [kg]	Oil filling [l]
	i _N	Ø d ₁ k ₆	k ₁	l ₁	m ₁	Ø x ₁	Ø d ₂ m ₆	k ₂	l ₂	m ₂	Ø x ₂		
PE 18	90...315	25	227	72	155	-	95	350	170	180	-	235	23
PE 20	125...450	25	227	72	155	-	120	370	190	180	-	325	30
PE 22	71...200	35	307	100	207	-	130	405	190	215	-	445	45
	224...450	30											
PE 25	90...250	35	307	100	207	-	145	450	230	220	296	580	55
	280...560	30											
PE 28	71...450	35	319	100	219	-	160	480	230	250	328	740	76
PE 31	100...630	35	319	100	219	-	175	540	290	250	348	1035	100

Tapped centre holes in shaft ends DIN 332 Form DS		
d_1, d_2		
25...30	35	> 85
M 10	M 12	M 24

Keys to DIN 6885/1 supplied by ELECON

Type of protection as per IP 55

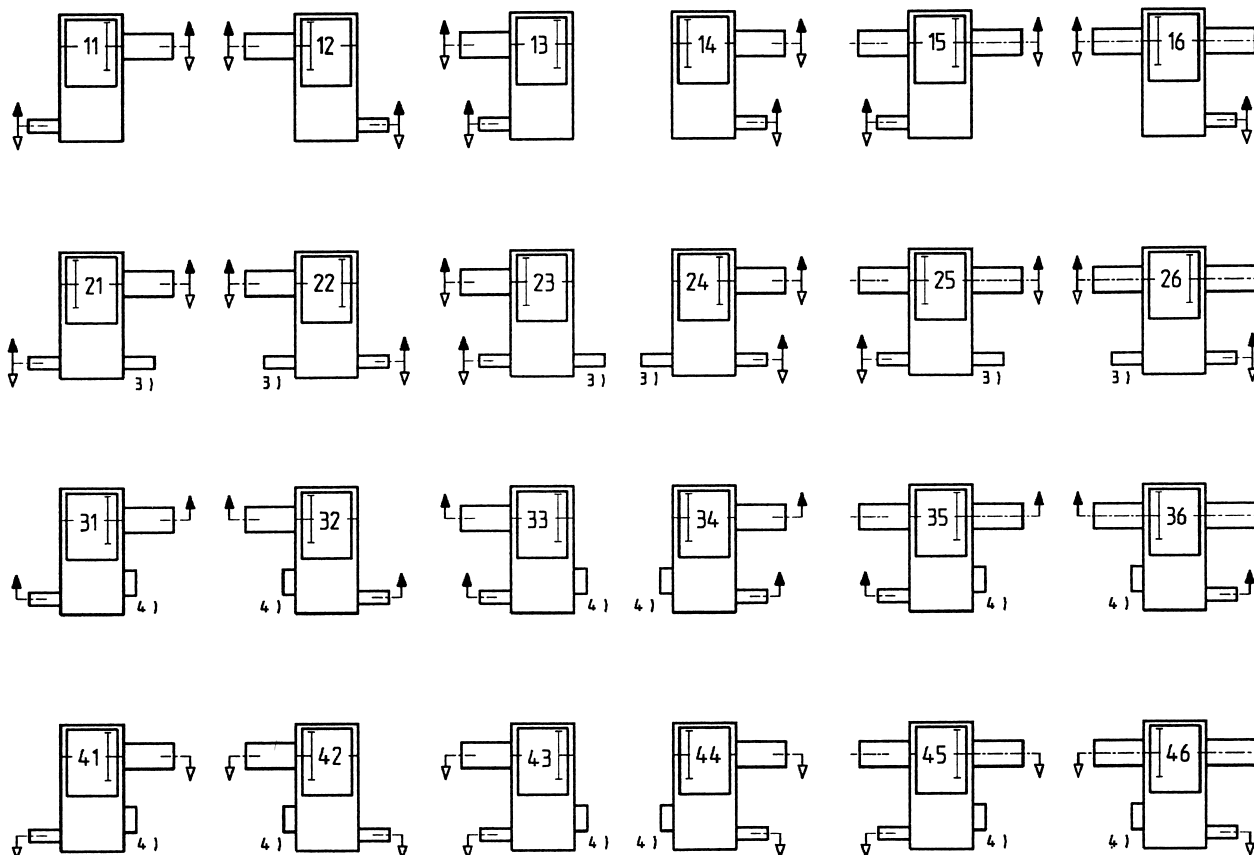
Type	b_6 -0.2	c_6	c_8	$\varnothing d$ H9	e_7	f_7	g	h -0.2	h_1 -0.2	h_2	h_7	h_8	n_2	o	p_2	p_7	Fitting		t_7	u_7	w_{1s}	w_{2SV}	w_{2SH}
																	$\varnothing s_8$	$ds \times l_{max}$					
PE 18	147	32	64	22	348	284	458	190	96	483	245	229	654	155	-	690	16.5	M14x100	260	258	26	51	28
PE 20	147	32	64	22	414	284	511	225	96	537	280	264	764	190	-	795	16.5	M14x100	330	258	26	51	28
PE 22	179	41	76	26	426	346	580	235	119	611	305	278	826	190	-	865	24	M20x130	326	312	51	59	33
PE 25	179	41	77	26	486	346	638	265	119	669	335	308	940	220	204	980	24	M20x130	384	312	51	64	59
PE 28	210	48	92	33	504	408	706	280	153	744	360	330	1000	227	246	1030	28	M24x150	386	366	36	67	67
PE 31	210	48	94	33	574	408	773	315	153	812	395	365	1137	262	239	1165	28	M24x160	456	366	36	67	67

1) Hollow shaft and machine shaft see dimensions 900-0212-MB 1 and 900-0213-MB1

2) Torque arms see dimensions 900-0253-MB1

Location of input and output shafts

Directions of rotation viewing ⇄



3) Add. shaft extension or double ext. shaft (900-0200-...)

4) Backstop

K	PE	22	-	T6	6	-	V	11	-	250	-	Z	0
---	----	----	---	----	---	---	---	----	---	-----	---	---	---

Example

[z] Add. cooling
[0] Without add. cooling

Nominal ratio

Location of shafts
Permissible direction of rotation

Output shaft

[V] Solid shaft
[G] Hollow shaft with shrink disc
[H] Hollow shaft with key-way
[F] Flange shaft

Mounting arrangement ⁵⁾

[0] Shaft mount. with torque arm
[1] Wall mounted
[3] Wall mounted
[4] Wall mounted
[6] Foot mounted

[T6] Vertical mounting gear unit with horizontal parallel shafts, high speed shaft downward

Size

Helical gear unit, EP-Series, [E] 4 stage

Motor attachment

[K] Motor bell housing
[M] Adjustable motor base
[J] Motor bracket, base plate

5) See dimension sheet 900-0220-MB9

Power ratings

Bevel Helical Units, two-stage

Type			Gearbox Size							
PLB			10	12	16	20	25	31	40	45
i _N	n ₁ [min ⁻¹]	n ₂	Nominal Power P _N [kW]							
5.6	1500 1000	270 160	30 20	80 53	160 107	314 209	555 370	956 638	1806 1204	3169 2113
6.3	1500 1000	240 160	27 18	67 45	138 92	274 183	471 314	835 557	1566 1044	2817 1878
7.1	1500 1000	211 141	21 14	55 36	110 73	221 147	403 268	726 484	1389 926	2256 1504
8	1500 1000	188 125	21 14	56 37	112 75	220 147	389 259	670 446	1264 843	2219 1479
9	1500 1000	167 111	19 12	47 31	97 65	192 128	330 220	585 390	1096 731	1972 1315
10	1500 1000	150 100	15 10	39 26	78 52	157 105	286 191	515 343	986 658	1602 1068
11.2	1500 1000	134 89	15 10	40 27	80 53	157 105	278 185	478 319	903 602	1585 1056
12.5	1500 1000	120 80	13 9	34 22	70 46	138 92	237 158	421 281	789 526	1420 947
14	1500 1000	107 71	10 7	28 18	56 37	112 75	204 136	368 245	705 470	1144 763
16	1500 1000	94 63	11 7	27 18	56 37	107 71	194 130	335 223	632 421	1109 740
18	1500 1000	83 56	9,3 6,2	23 16	48 32	96 64	165 110	292 195	548 365	986 657
20	1500 1000	75 50	7,3 4,9	19 13	39 26	79 52	143 95	258 172	493 329	801 534
22.4	1500 1000	67 44,5	6,9 4,6	18 12	37 25	70 47	128 85	220 147	423 282	743 496

Nominal Output Torques

Bevel Helical Gear Units, two-stage

Type		Gearbox Size							
PLB		10	12	16	20	25	31	40	45
i _N	Nominal Output Torques T _{2N} [kNm]								
5.6	1.07	2.58	5.72	11.2	19.8	34.1	64.4	113	102
6.3									
7.1	0.93	2.47	4.96	10	18.2	32.8	62.8	113	102
8	1.07	2.85	5.72	11.2	19.8	34.1	64.4	113	102
9									
10	0.93	2.47	4.96	10	18.2	32.8	62.8	113	102
11.2	1.07	2.85	5.72	11.2	19.8	34.1	64.4	113	102
12.5									
14	0.93	2.47	4.96	10	18.2	32.8	62.8	113	102
16	1.07	2.80	5.72	10.9	19.8	34.1	64.4	113	102
18									
20	0.93	2.47	4.96	10	18.2	32.8	62.8	113	102
22.4	0.99	2.52	5.26			31.4	60.3	106	106

Power ratings

Type				Gearbox Size																									
PLC				14	16	18	20	22	25	28	31	35	40	42	45	47	50	53	56	60	63	67							
Bevel Helical Gear Units, three-stage	i _N	n ₁ n ₂ [min-1]		Nominal Power																				P _N [KW]					
	18	1500 1000	83 56	28 19		77 51		147 98		296 197		517 345		917 611			1690 1130			3000 2000									
	20	1500 1000	75 50	26 17		66 44		132 88		266 177		475 317		825 550			1520 1015			2700 1800	3270 2180								
	22.4	1500 1000	67 44.5	22 14		57 38		116 77	173 115	225 150		400 266	554 369	730 487	919 613		1360 906	1680 1120		2410 1605	2920 1945	3390 2260							
	25	1500 1000	60 40	20 13		56 37	74 49	106 71	146 97	213 142	296 197	372 248	497 331	660 440	839 559		1220 812	1500 1000	1865 1245	2160 1440	2515 1675	3035 2025							
	28	1500 1000	54 35.5	18 12	30 20	47 31	66 44	94 63	129 80	190 127	264 176	339 226	430 279	589 393	721 481	904 603	1090 725	1315 880	1665 1110	1930 1285	2335 1555	2580 1720							
	31.5	1500 1000	47.5 31.5	15 10	27 18	40 27	59 39	82 54	123 82	160 107	218 145	283 188	394 263	519 346	653 435	819 546	966 644	1200 795	1425 949	1710 1140	2075 1385	2410 1605							
	35.5	1500 1000	42.5 28	14 9.3	23 15	39 26	52 35	74 49	103 69	150 100	208 139	262 175	350 233	465 310	591 394	706 471	858 572	1060 705	1315 875	1520 1010	1770 1180	2140 1425							
	40	1500 1000	37.5 25	13 8.7	21 14	33 22	46 31	66 44	89 60	133 89	185 123	237 158	300 200	413 275	505 337	633 422	761 507	920 614	1165 777	1350 900	1635 1090	1805 1205							
	45	1500 1000	33.5 22.2	11 7.2	19 13	29 19	41 27	58 38	86 57	112 75	152 101	200 133	276 184	363 242	457 305	574 383	677 451	835 557	997 665	1200 800	1450 968	1690 1125							
	50	1500 1000	30 20	10 6.7	16 11	28 19	37 25	53 35	73 49	106 71	148 99	186 124	248 165	330 220	420 280	502 335	609 406	751 500	932 621	1080 720	1260 838	1520 1010							
	56	1500 1000	27 17.9	9.1 6.1	15 10	23 15	33 22	47 31	64 43	95 63	132 88	169 113	215 142	295 197	361 241	452 300	544 363	658 439	833 555	963 642	1170 778	1290 860							
	63	1500 1000	23.8 16	7.7 5.2	13 8.7	20 14	29 20	41 28	61 41	80 53	109 73	142 95	197 131	259 173	327 218	410 273	483 322	570 397	712 475	856 571	1040 691	1205 805							
	71	1500 1000	21 14	7.0 4.7	11 7.5	18 12	26 17	37 25	51 34	71 47	104 69	126 84	175 117	222 148	295 197	353 235	429 286	529 353	657 438	754 503	885 590	1070 713							
	80	1500 1000	18.8 12.5		11 7.3		23 15		45 30		92 61		150 100		252 168	317 211		461 307	583 389		778 519	903 602							
	90	1500 1000	16.7 11.1		9.4 6.3		21 14		40 27		76 51		133 89		220 145	287 191		405 270	498 332			804 535							
	100	1500 1000	15 10		8.0 5.3		18 12				67 45					251 167			444 296										
	112	1500 1000	13.4 8.9		7.2 4.8											218 144													

PLD				14	16	18	20	22	25	28	31	35	40	42	45	47	50	53	56	60	63	67												
Bevel Helical Gear Units, four-stage	71	1500 1000	21 14	7.2 4.8																														
	80	1500 1000	18.8 12.5	6.4 4.3		17 11		33 22		67 45		116 77		206 137			381 254			674 450														
	90	1500 1000	16.7 11.1	5.4 3.6		15 10		29 19		59 39		105 70		183 122			338 225			600 400	726 484													
	100	1500 1000	15 10	5.1 3.4		12.9 8.6		26 17.3	39 26	50 33		90 60	124 83	163 109	206 137		304 203	376 251		539 360	653 435	760 506												
	112	1500 1000	13.4 8.9	4.6 3.1	7.6 5.1	12 8.0	17 11	24 16	33 22	48 32	66 44	83 55	111 74	147 98	187 125		272 181	335 223	416 277	482 321	561 374	677 451												
	125	1500 1000	12 8	3.9 2.5	6.8 4.5	11 7.3	15 10	21 14	29 19	43 29	59 39	76 51	96 64	132 88	162 108	203 135	244 163	295 197	373 249	432 288	523 349	578 385												
	140	1500 1000	10.7 7.1	3.7 2.5	5.7 3.8	9.5 6.1	13.2 8.8	18.5 12.3	28 19	36 24	49 33	64 42	89 59	117 78	147 98	184 123	217 145	267 181	320 213	385 257	467 311	542 361												
	160	1500 1000	9.4 6.3	3.2 2.1	5.3 3.5	8.7 5.8	12 8.0	17 11	23 15	33 22	46 31	58 39	78 52	103 69	131 87	157 105	190 127	235 157	291 194	337 225	393 262	474 316												
	180	1500 1000	8.33 5.55	2.7 1.8	4.7 3.1	7.3 4.9	10 6.7	15 10	19 13	30 20	41 27	53 35	66 44	92 61	112 75	141 94	169 113	205 137	259 173	300 200	363 242	401 267												
	200	1500 1000	7.5 5	2.6 1.7	4.0 2.7	6.4 4.3	9.3 6.2	13 8.6	20 13	25 17	34 23	45 30	62 41	82 55	103 69	129 86	152 101	188 125	224 149	270 180	327 218	380 253												
	224	1500 1000	6.7 4.46	2.3 1.5	3.8 2.5	6.2 4.1	8.3 5.5	12 8.0	16 11	24 16	33 22	42 28	55 37	74 49	94 63	112 75	136 91	167 112	208 139	241 161	281 187	340 226												
	250	1500 1000	6 4	1.9 1.3	3.4 2.3	5.3 3.5	7.4 4.9	11 7.3	14 9.5	21 14	30 20	38 25	48 32	66 44	81 54	101 67	122 81	147 98	186 124	216 144	261 174	290 193												
	280	1500 1000	5.36 3.57	1.8 1.2	2.9 1.9	4.6 3.0	6.6 4.4	9.2 6.1	14 9.3	18 12	25 17	32 21	44 29	58 39	74 49	92 61	109 73	134 89	160 107	193 129	233 155	271 181												
	315	1500 1000	4.76 3.17		2.7 1.8	4.1 2.7	5.9 3.9	8.2 5.5	12 8.0	16 11	23 15	28 19	39 26	50 33	67 45	80 53	97 65	119 79	148 99	171 114	200 133	241 161												
	355	1500 1000	4.22 2.82		2.4 1.6		5.2 3.5		10 6.7		21 14		34 22		57 38	71 47		104 69	131 87		177 118	204 136												
	400	1500 1000	3.75 2.5		2.0 1.3		4.6 3.1		9.0 6.0		17 11		30 20		50 33	65 43		91 61	112 75			181 120												
	450	1500 1000	3.35 2.22		1.8 1.2		4.1 2.7				15 10						56 37		99 66															
	500	1500 1000	3 2														49 32																	

Thermal capacities

Type PLB... -R1									
Average air speed	n1 (min ⁻¹)	Gearbox Size							
		10	12	16	20	25	31	40	45
		Pto [kW] / without add. cooling							
Vw = 0.5 m/s 1)	-	15	26	42	60	94	127	175	237
Vw = 1.2 m/s 2)	-	22	37	61	85	134	182	250	338
Vw = 4.0 m/s 3)	-	28	48	79	111	174	236	325	439
		Pt1 [kW] / with fan							
-	1500	37	71	118	166	260	353	485	On Request
-	1000	27	53	88	123	193	263	361	
		Pt3 [kW] / with cooling coil							
Vw = 0.5 m/s 1)	-	-	59	168	230	421	566	884	946
Vw = 1.2 m/s 2)	-	-	70	187	256	461	620	959	1047
Vw = 4.0 m/s 3)	-	-	81	205	282	501	675	1034	1148
		Pt4 [kW] / with fan and cooling coil							
-	1500	-	104	244	336	588	792	1194	On request
-	1000	-	86	214	294	521	702	1070	
Vw = 0.5 m/s	Values of P ₁₀ - and P ₁₃ meant for gearbox sizes 40 & 45 are applicable from ratios as indicated.							9	11.2
Vw = 1.2 m/s								6.3	8
Vw = 4.0 m/s								5.6	5.6

Type PLC.. -R1																				
Average air speed	n1 (min ⁻¹)	Gearbox Size																		
		14	16	18	20	22	25	28	31	35	40	42	45	47	50	53	56	60	63	67
		Pto [kW] / without add. cooling																		
Vw = 0.5 m/s 1)	-	15	20	25	32	39	47	55	66	95	109	123	148	180	180	212	259	268	306	346
Vw = 1.2 m/s 2)	-	21	28	35	44	54	65	77	92	132	151	171	206	250	250	295	360	372	425	480
Vw = 4.0 m/s 3)	-	27	35	45	56	69	83	99	118	169	193	219	264	320	320	378	461	476	544	614
		Pt1 [kW] / with fan																		
-	1500	41	54	68	86	105	126	149	179	257	294	333	401	485	485	574	700	On request		
-	1000	30	40	51	64	78	94	111	133	191	218	247	298	360	360	425	520			
		Pt3 [kW] / with cooling coil																		
Vw = 0.5 m/s 1)	-	43	82	57	116	123	207	174	288	278	500	415	539	571	669	845	892	901	939	979
Vw = 1.2 m/s 2)	-	49	89	67	128	138	225	195	314	315	542	463	597	641	739	928	993	1005	1058	1113
Vw = 4.0 m/s 3)	-	55	97	76	141	153	243	216	340	352	584	511	655	711	809	1011	1094	1109	1177	1247
		Pt4 [kW] / with fan and cooling coil																		
-	1500	69	116	100	170	189	266	267	401	440	686	626	793	877	974	1207	1333	On request		
-	1000	58	102	83	148	162	254	229	355	374	610	540	690	752	849	1058	1153			
Vw = 0.5 m/s	Values of Pto- and Pt3 meant for gearbox sizes 35 - 67 are applicable from ratios as indicated.									22.4	22.4	28	28	28	31.5	31.5	31.5	35.5	35.5	35.5
Vw = 1.2 m/s										18	22.4	18	22.4	28	22.4	22.4	25	25	25	25

Type PLD.. -R1																				
Average air speed	n1 (min ⁻¹)	Gearbox Size																		
		14	16	18	20	22	25	28	31	35	40	42	45	47	50	53	56	60	63	67
		Pto [kW] / without add. cooling																		
Vw = 0,5 m/s 1)	-	12	16	20	26	31	37	44	53	67	76	86	104	126	126	165	202	209	238	269
Vw = 1,2 m/s 2)	-	17	22	28	36	43	52	61	74	93	106	120	144	175	175	229	280	290	331	374
Vw = 4,0 m/s 3)	-	22	28	36	45	55	66	79	94	119	136	154	184	224	224	293	358	371	424	479
		Pt3 [kW] / with cooling coil																		
Vw = 0,5 m/s 1)	-	34	65	45	93	80	166	139	231	195	350	291	378	400	506	657	694	701	730	761
Vw = 1,2 m/s 2)	-	39	71	53	103	92	180	156	251	221	380	325	418	449	555	721	772	782	823	866
Vw = 4.0 m/s 3)	-	44	78	61	113	104	194	173	272	247	410	359	458	498	604	785	850	863	916	971

- 1) Small closed room, little air movement
2) Large hall with free air movement
3) Constantly strong air movement

Table 4 : fw : Thermal Factor					
v u [°C]	ED %				
	100	80	60	40	20
10	1.14	1.21	1.34	1.53	2.03
20	1.00	1.06	1.17	1.34	1.78
30	0.86	0.91	1.00	1.15	1.53
40	0.71	0.76	0.84	0.96	1.27
50	0.57	0.61	0.67	0.77	1.02

Thermal capacities of types PLC/PLD-S5 and - T6, -U3, -U4 on request

Table 5 : fa : Utilization Factor									
Utilization Pe / Pn [%]									
20	30	40	50	60	70	80	90	100	
0.7	0.8	0.86	0.9	0.93	0.96	0.98	0.99	1	

For values less than 20% consult ELECON

Nominal Output Torques

Bevel Helical Units, 3-stage

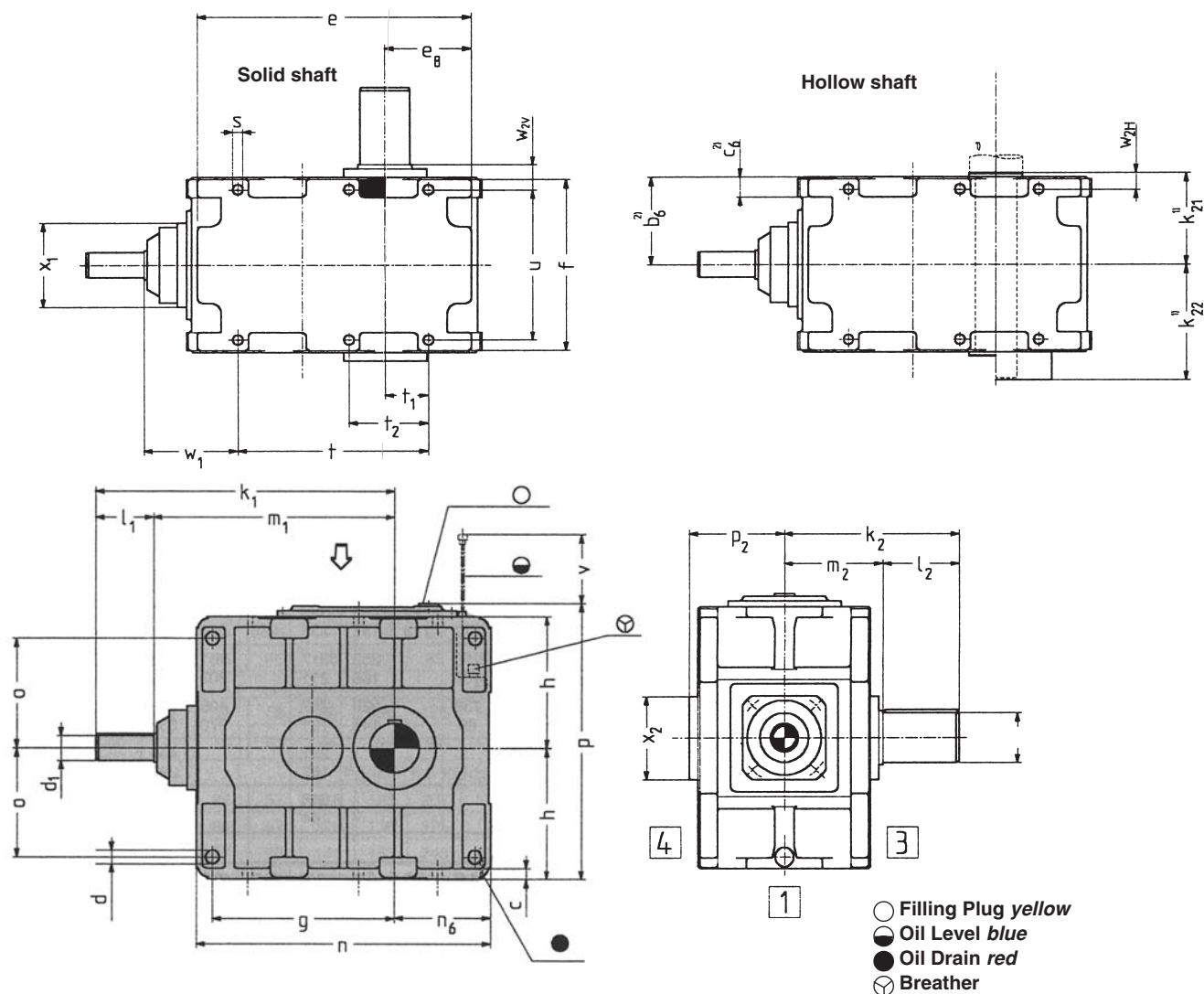
Type	Gearbox Size																		
PLC	14	16	18	20	22	25	28	31	35	40	42	45	47	50	53	56	60	63	67
i_N	Nominal Output Torques T_{2N} [kNm]																		
18									59.3										
20	3.26		8.86		16.8		33.9		60.4		105								
22.4	3.1		8.2		16.5	24.6	32.0		57.0	79.0	104	131						416	
25															239			400	483
28	3.26		8.86		16.8	23.3	33.9	47.0	59.3		105	134			235	297		416	460
31.5	3.1	5.41	8.2		16.5	24.6	32.0	43.7	57.0	79.0	104	131	164		239	286		416	483
35.5																			
40	3.26	5.1	8.86		16.8	23.3	33.9	47.0	59.3		105	134	161		239	297	343	400	483
45	3.1	5.41	8.36		16.5	22.8	32.0	43.7	60.4	76.0	104	129	164		235	297		416	460
50																			
56	3.26	5.1	8.86	11.8	16.8	24.6	32.0	43.7	57.0	79.0	104	131	160		239	286		416	483
63																			
71	3.16	5.1	8.36		16.8	23.3	33.9	47.0	59.3		105	134	155		235	297		400	460
80																			
90		5.41																	
100																			
112		5.1																	

Bevel Helical Units, 4-stage

Type	Gearbox Size																		
PLD	14	16	18	20	22	25	28	31	35	40	42	45	47	50	53	56	60	63	67
i_N	Nominal Output Torques T_{2N} [kNm]																		
71																			
80	3.26		8.86		16.8		33.9		59.3		105								
90	3.1		8.36		16.5	24.6	32.0		60.4		104	131						416	
100																			
112	3.26		8.2		16.5	23.3	32.0		57.0	79.0	104	134			239			400	483
125	3.1	5.41	8.86		16.8	22.8	33.9	47.0	59.3		105	134			235	297		416	460
140																			
160	3.26	5.1	8.2		16.5	24.6	32.0	43.7	57.0	79.0	104	131	164		239	286		416	483
180	3.1	5.41	8.86		16.8	23.3	33.9	47.0	59.3		105	134	160		239	297	343	400	483
200																			
224	3.26	5.1	8.36		16.5	22.8	32.0	43.7	60.4	76.0	104	129	161		235	297		416	460
250	3.1	5.41	8.86	11.8	16.8	24.6	32.0	43.7	57.0	79.0	104	131	164		239	286		416	483
280																			
315																			
355		5.41																	
400																			
450		5.1																	
500																			

Dimensions

Type PLB 10-R1 ... PLB 45-R1



Type	Input shaft					Output shaft					Weight [kg]	Oil filling [l]
	Ø d ₁	k ₁	l ₁	m ₁	Ø x ₁	Ø d ₂ m ₆	k ₂	l ₂	m ₂	Ø x ₂		
PLB 10	25 k ₆	406	85	321	148	50 k ₆	240	105	135	-	80	4.5
PLB 12	40 k ₆	533	120	413	190	65	304	135	169	-	160	10
PLB 16	50 k ₆	611	120	491	225	85	356	145	211	-	310	20
PLB 20	60 m ₆	723	145	578	255	120	433	190	243	-	500	40
PLB 25	75 m ₆	891	160	731	285	145	495	230	265	296	900	70
PLB 31	85 m ₆	1064	180	884	350	160	540	230	310	328	1400	120
PLB 40	100 m ₆	1309	215	1094	440	155	665	290	375	328	2300	150
PLB 45	130 m ₆	1530	250	1280	540	195	780	330	450	400	3900	220

Tapped centre holes in shaft ends DIN 332 Form DS			
d ₁ , d ₂			
25	40...50	60...85	> 85
M 10	M 16	M 20	M 24

Keys to DIN 6885/1 supplied by ELECON

Type of protection as per IP 55

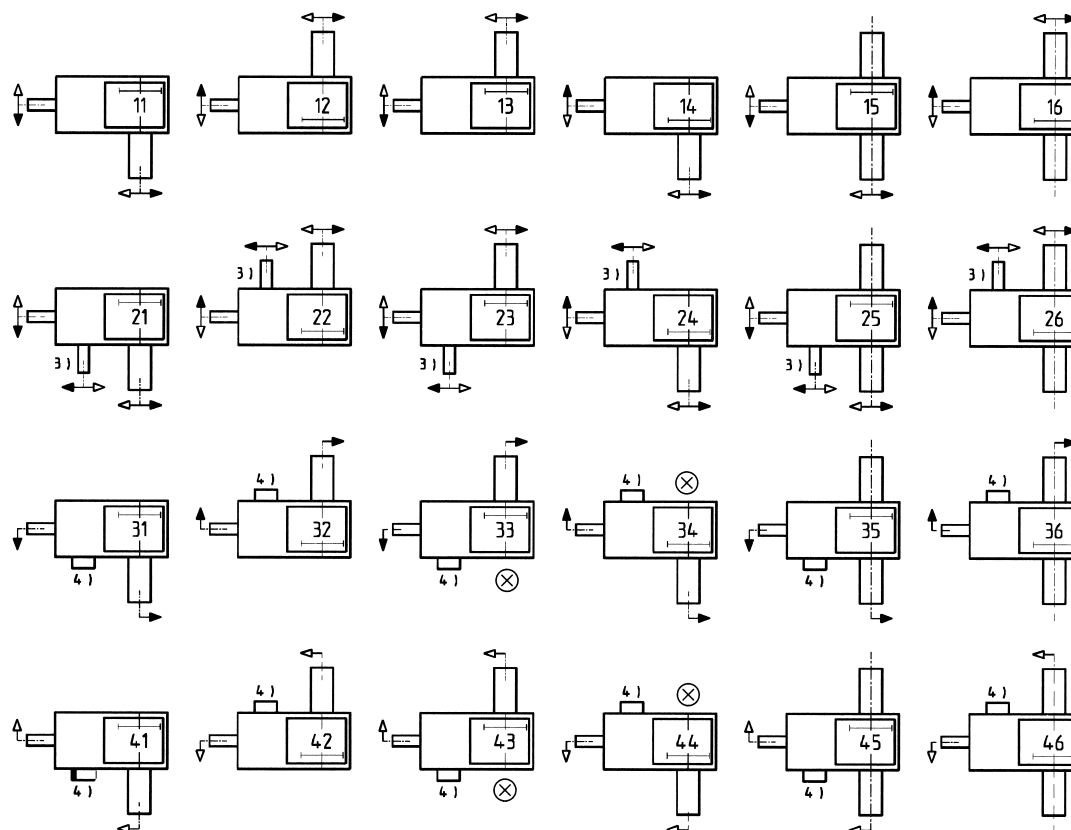
Type	b ₆ -0.2	c	c ₆	Ø d _{H9}	e	e ₈	f	g	g ₆	h -0.2	n	n ₆	o	p	p ₂	Ø s	Fitting d _s x l _{max}	t	t ₁	t ₂	u	v	w ₁	w _{2V}	w _{2H}
PLB 10	113	15	27	16	338	107	216	222	99	150	364	120	121	333	-	12	M10x45	218	50	-	192	195	99	39	27
PLB 12	147	16	32	22	448	147	284	292	138	190	480	163	155	404	-	14.5	M12x70	311	78	-	248	240	180	45	33
PLB 16	179	22	41	26	556	179	348	368	170	265	600	201	220	560	-	18.5	M16x110	396	99	-	306	325	194	58	36
PLB 20	210	26	48	33	662	207	410	442	194	315	714	233	262	663	-	24	M20x130	461	104	-	360	375	221	63	40
PLB 25	225	28	48	33	772	251	438	508	238	375	824	277	322	787	256	24	M20x160	574	152	-	388	60	309	71	71
PLB 31	265	30	48	33	928	297	522	618	284	425	980	323	373	887	302	28	M24x180	716	191	315	468	100	359	76	76
PLB 40	320	35	62	45	968	303	630	749	-	450	1220	421	400	913	357	28	M24x220	906	270	410	576	250	458	87	92
PLB 45	395	45	75	60	1197	371	774	914	-	475	1494	515	410	962	432	35	M30x160	1115	330	485	712	300	495	94	89

1) Hollow shaft and machine shaft see dimensions sheet 900-0212-MB 1 and 900-0213-MB1

2) Torque arms see dimensions sheet 900-0253-MB1

Location of input and output shafts

Directions of rotation viewing ↻



3) Add. shaft extension or double ext. shaft.

4) Backstop, see 900-1154-MB1

⊗ G33, G34, G43, G44 : Hollow shaft with shrink disc only possible from size ≥ 31

KPLB20 - R1 1 - V 11 - 14 - Z 1

Example

- [z] Add. cooling
- [0] Without add. cooling
- [1] 1 Fan
- [3] Cooling coil
- [4] 1 Fan + Cooling Coil

Nominal ratio

Location of shafts
Permissible direction of rotation

Output shaft

- [V] Solid shaft
- [G] Hollow shaft with shrink disc
- *) [H] Hollow shaft with key-way
- [F] Flange shaft

Mounting arrangement

- [0] Shaft mount. with torque arm
- [1] Foot mounted
- [3] Wall mounted *)
- [4] Wall mounted *)

[R1] Horizontal gear unit

Size

Bevel-helical gear unit, EP-Series, [LB] 2 stage

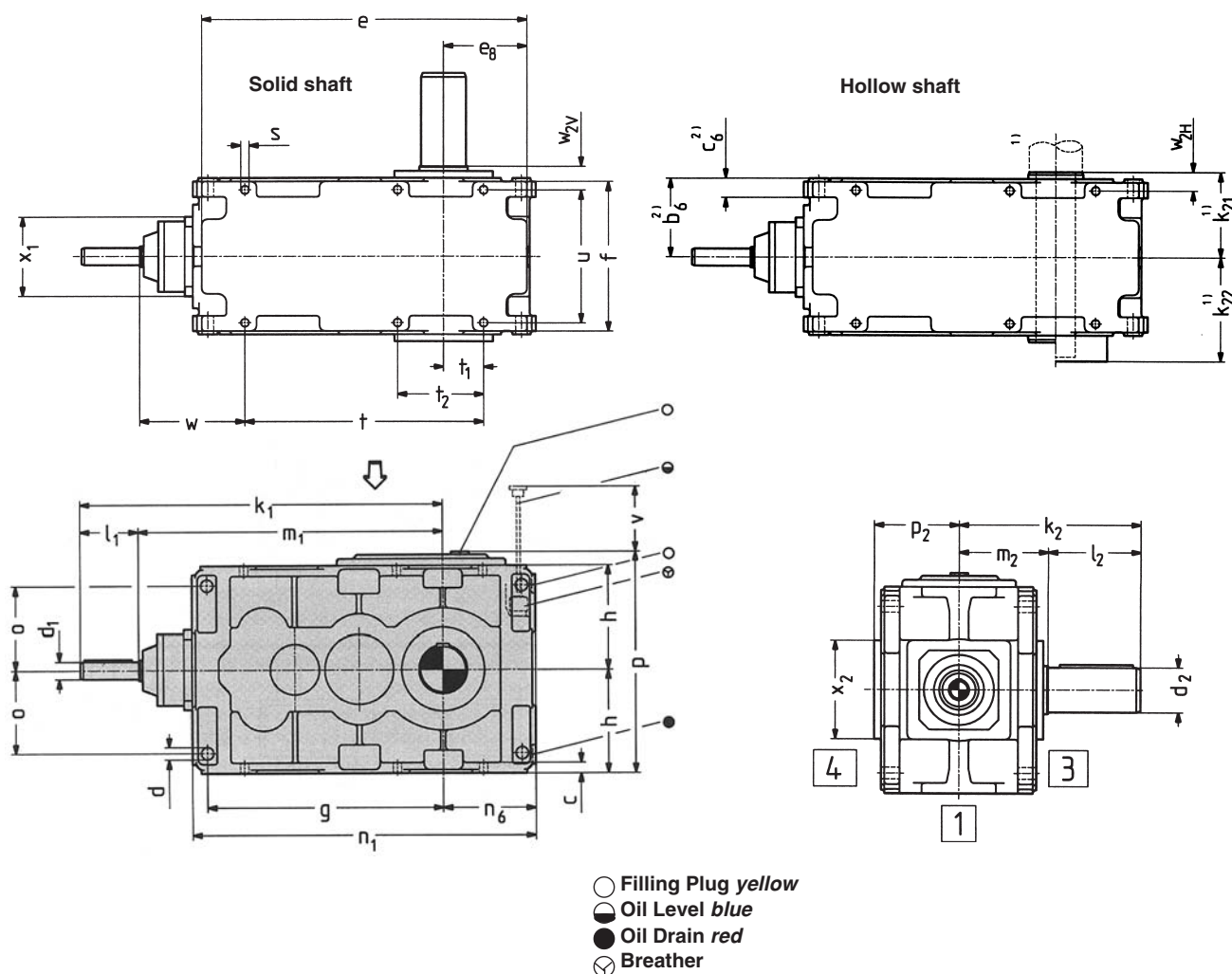
Motor attachment

- [K] Motor bell housing
- [M] Adjustable motor base
- [J] Motor bracket, base plate

*) Except type PLB45

Dimensions

Type PLC 14-R1 ... PLC 31-R1



Type	Input shaft					Output shaft					Weight [kg]	Oil filling [l]
	Ø d ₁	k ₁	l ₁	m ₁	Ø x ₁	Ø d ₂ m6	k ₂	l ₂	m ₂	Ø x ₂		
PLC 14	25 k6	528	85	443	148	65	270	135	135	-	115	6
PLC 16	25 k6	584	85	499	148	85	290	145	145	-	170	9
PLC 18	40 k6	699	120	579	190	95	350	170	180	-	245	14
PLC 20	40 k6	753	120	633	190	120	370	190	180	-	335	19
PLC 22	50 k6	823	120	703	225	130	405	190	215	-	460	27
PLC 25	50 k6	881	120	761	225	145	450	230	220	296	595	34
PLC 28	60 m6	986	145	841	255	160	480	230	250	328	775	46
PLC 31	60 m6	1054	145	909	255	175	540	290	250	348	1065	62

Tapped centre holes in shaft ends DIN 332 Form DS			
d ₁ , d ₂			
25	40...50	60...85	> 85
M 10	M 16	M 20	M 24

Keys to DIN 6885/1 supplied by ELECON

Type of protection as per IP 55

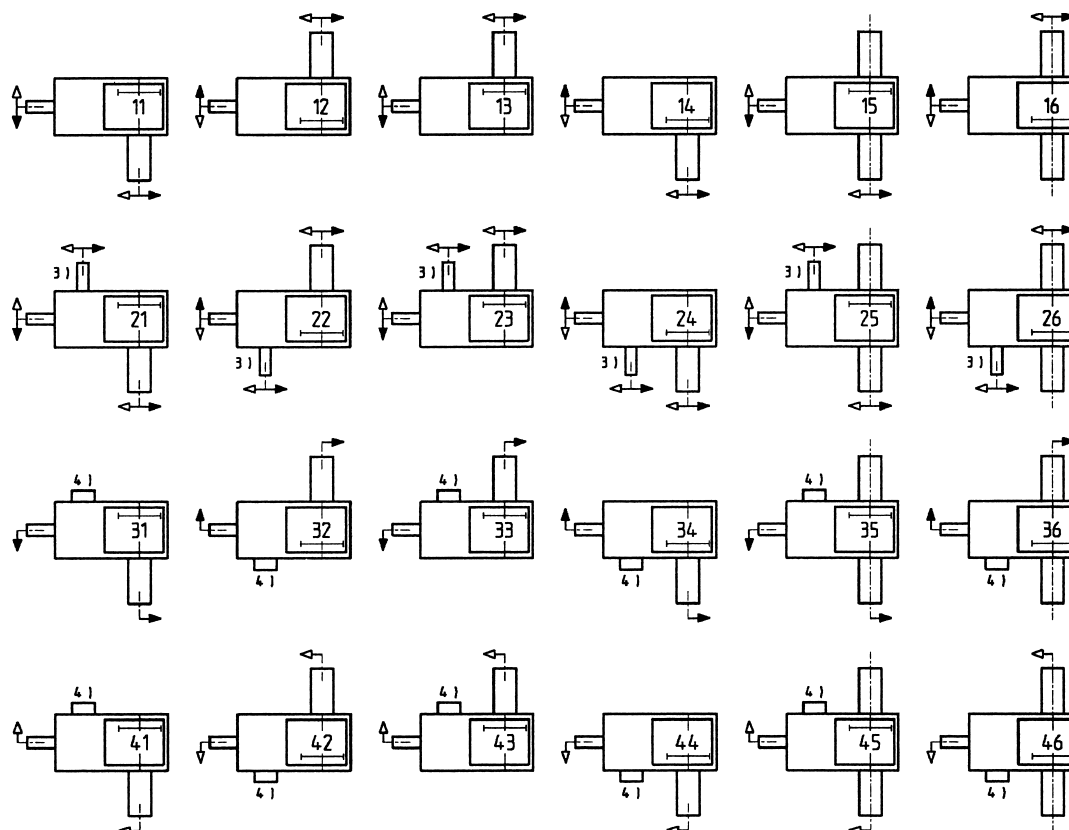
Type	b ₆ -0.2	c	c ₆	Ø d H9	e	e ₈	f	g	h -0.2	n ₁	n ₆	o	p	p ₂	Fitting		t	t ₁	t ₂	u	v	w ₁	w _{2v}	w _{2H}
															Ø s	d _s x l _{max}								
PLC 14	113	15	27	16	474	121	216	344	150	500	134	121	333	-	12	M10x45	348	58	125	192	30	153	39	27
PLC 16	113	15	27	16	579	170	216	400	180	605	183	151	393	-	12	M10x80	453	107	217	192	75	153	49	27
PLC 18	147	18	32	22	622	155	284	458	190	654	171	155	419	-	14.5	M12x55	486	87	175	248	45	180	56	33
PLC 20	147	18	32	22	732	211	284	511	225	764	227	190	489	-	14.5	M12x90	596	143	285	248	70	180	56	33
PLC 22	179	24	41	26	782	193	346	580	235	826	215	190	513	-	18.5	M16x65	622	113	226	306	60	194	62	36
PLC 25	179	24	41	26	896	249	346	638	265	940	271	220	573	204	18.5	M16x90	736	169	340	306	100	194	67	62
PLC 28	210	28	48	33	948	230	408	706	280	1000	256	227	610	246	24	M20x80	752	132	265	360	80	221	70	70
PLC 31	210	28	48	33	1085	299	408	773	315	1137	325	262	680	239	24	M20x110	889	201	402	360	90	221	70	70

1) Hollow shaft and machine shaft see dimensions sheet 900-0212-MB 1 and 900-0213-MB1

2) Torque arms see dimensions sheet 900-0253-MB1

Location of input and output shafts

Directions of rotation viewing ↻



3) Add. shaft extension or double ext. shaft (900-1200-...)

4) Backstop, see 900-1254-MB1

K PLC 22 - R1 1 - V 11 - 25 - Z 1

Example

- [z] Add. cooling
 [0] Without add. cooling
 [1] 1 Fan
 [3] Cooling coil
 [4] 1 Fan + Cooling Coil

Nominal ratio

Location of shafts
 Permissible direction of rotation

Output shaft

- [V] Solid shaft
 [G] Hollow shaft with shrink disc
 [H] Hollow shaft with key-way
 [F] Flange shaft

Mounting arrangement ⁵⁾

- [0] Shaft mount. with torque arm
 [1] Foot mounted
 [3] Wall mounted
 [4] Wall mounted

[R1] Horizontal gear unit

Size

Bevel-helical gear unit, EP-Series, [LC] 3 stage

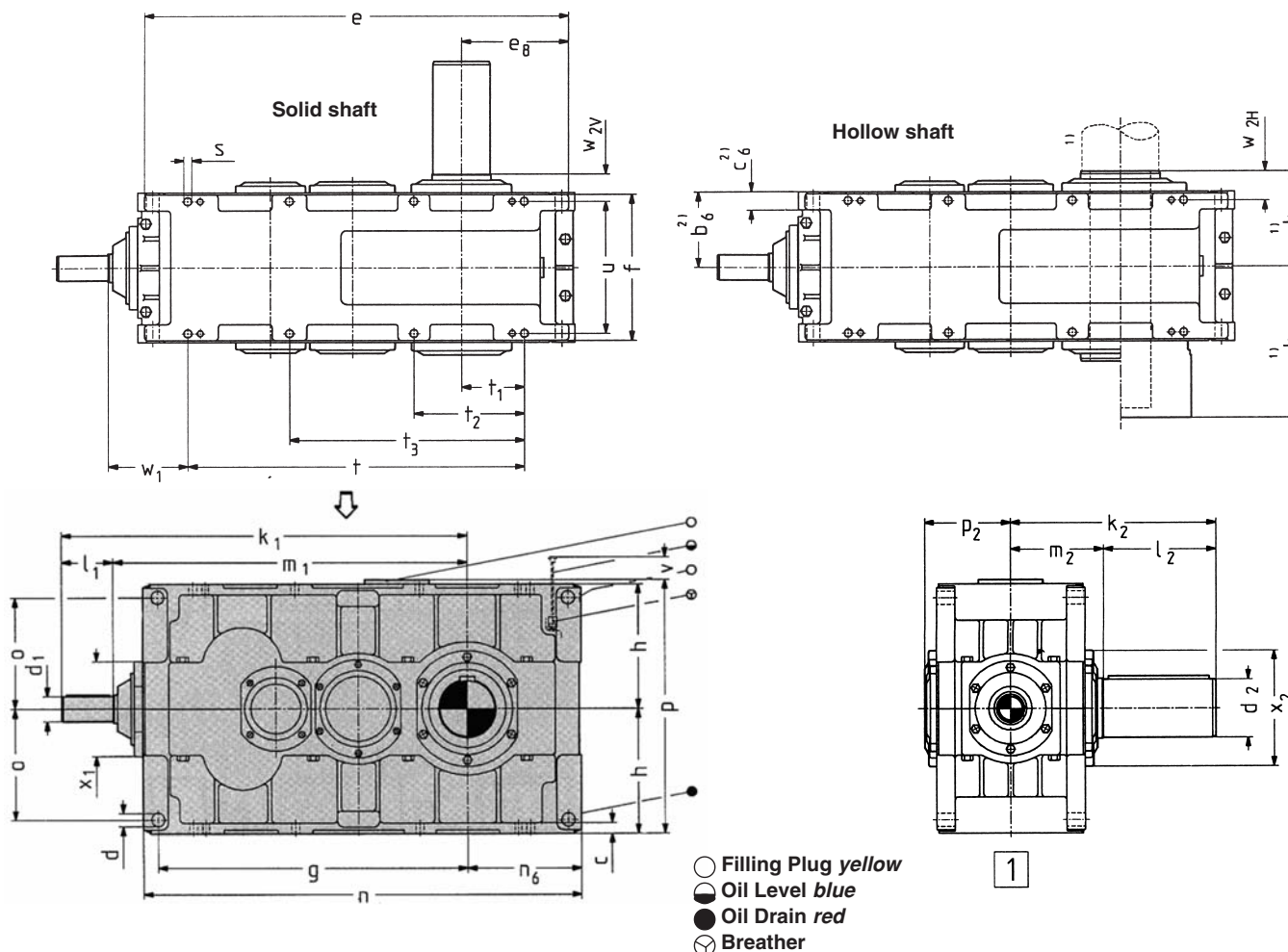
Motor attachment

- [K] Motor bell housing
 [M] Adjustable motor base
 [J] Motor bracket, base plate

5) See dimension sheet 900-0220-MB9

Dimensions

Type PLC 35-R1 ... PLC 67-R1



Type	Input shaft					Output shaft					Weight [kg]	Oil filling [l]
	Ø d ₁ m6	k ₁	l ₁	m ₁	Ø x ₁	Ø d ₂ m6	k ₂	l ₂	m ₂	Ø x ₂		
PLC 35	75	1214	160	1054	285	155	570	290	280	328	1500	55
PLC 40	75	1291	160	1131	285	175	570	290	280	348	1830	75
PLC 42	85	1455	180	1275	350	195	650	330	320	400	2200	90
PLC 45	85	1521	180	1341	350	210	730	410	320	440	2750	130
PLC 47	85	1607	180	1427	350	230	730	410	320	440	3300	175
PLC 50	100	1792	215	1577	440	250	795	410	385	480	4350	180
PLC 53	100	1863	215	1648	440	250	795	410	385	480	4950	250
PLC 56	100	1956	215	1741	440	270	845	460	385	540	5450	350
PLC 60	130	2113	250	1863	540	290	920	460	460	540	7400	360
PLC 63	130	2186	250	1936	540	310	970	510	460	580	8400	460
PLC 67	130	2257	250	2007	540	310	970	510	460	580	9450	570

d ₁ , d ₂	75...85	100
Tapped centre holes in shaft ends DIN 332 Form DS	M 20	M 24

Keys to DIN 6885/1 supplied by ELECON

Type of protection as per IP 55

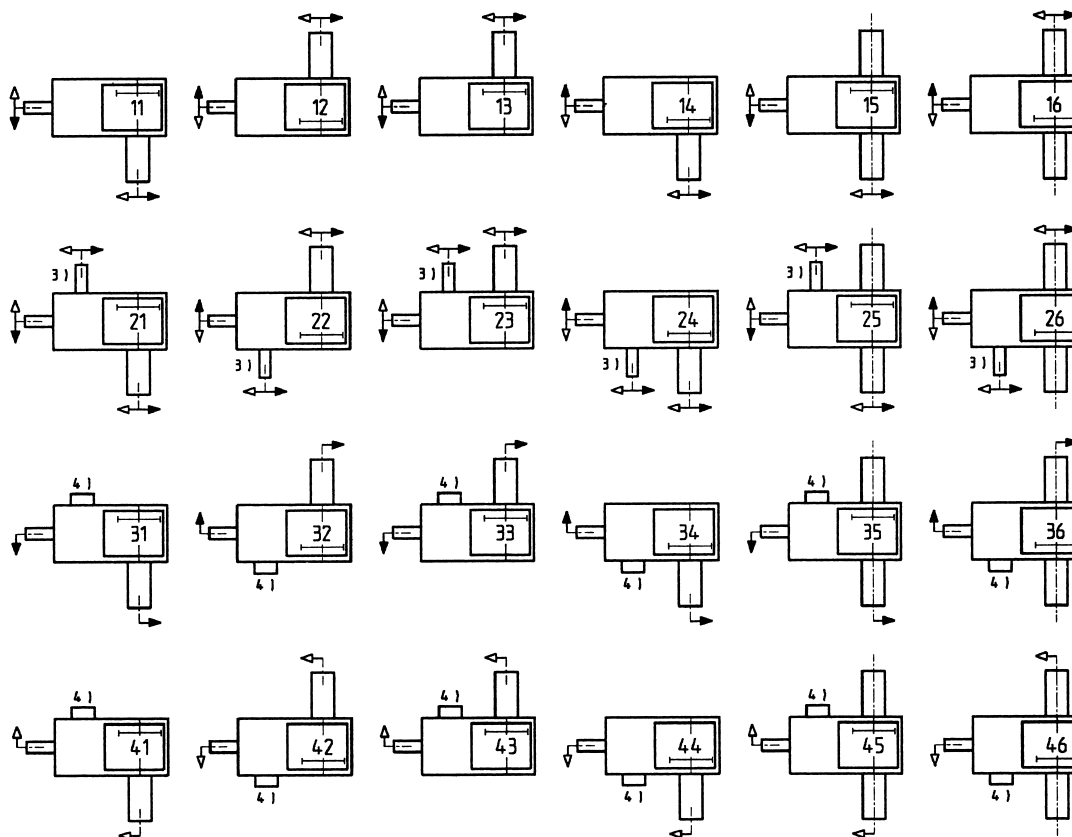
Type	b ₆	c	c ₆	Ø d _{H9}	e	e ₈	f	g	h -0.2	n	n ₆	o	p	p ₂	Fitting Øs d _s x l _{max}	t	t ₁	t ₂	t ₃	u	v	w ₁	w _{2v}	w _{2H}
PLC 35	225	32	55	40	1275	325	438	925	300	1315	345	255	610	262	24 M20x85	1005	190	325	695	396	190	239	82	87
PLC 40	225	32	55	40	1430	403	438	1002	375	1470	423	330	760	262	24 M20x120	1157	265	477	847	396	220	239	82	87
PLC 42	265	40	62	45	1555	392	514	1134	355	1615	422	305	720	303	28 M24x100	1230	225	390	820	460	250	270	90	85
PLC 45	265	40	62	45	1689	460	514	1200	425	1749	490	375	860	303	28 M24x120	1356	285	516	946	460	250	270	90	90
PLC 47	265	40	62	52	1860	545	514	1285	500	1920	575	440	1010	303	28 M24x250	1527	370	687	1117	460	250	270	90	100
PLC 50	320	50	75	60	1892	470	620	1392	425	1962	505	360	860	358	35 M30x120	1524	280	504	1014	560	250	333	105	110
PLC 53	320	50	75	60	2038	545	620	1463	500	2108	580	435	1010	358	35 M30x180	1670	355	650	1160	560	250	333	105	110
PLC 56	320	50	75	60	2231	645	620	1556	600	2301	680	535	1210	365	35 M30x250	1858	450	838	1348	560	250	333	105	110
PLC 60	395	60	90	65	2272	565	770	1669	530	2342	600	460	1070	440	42 M36x150	1840	345	630	1200	690	350	368	115	120
PLC 63	395	60	90	65	2420	640	770	1742	600	2490	675	530	1210	440	42 M36x200	1988	420	778	1348	690	350	368	115	120
PLC 67	395	60	90	70	2566	715	770	1806	670	2636	750	590	1350	440	42 M36x250	2134	495	924	1494	690	350	368	115	120

1) Hollow shaft and machine shaft see dimensions sheet 900-0212-MB 1 and 900-0213-MB1

2) Torque arms see dimensions sheet 900-0253-MB1

Location of input and output shafts

Directions of rotation viewing ↗



3) Add. shaft extension

4) Backstop, see 900-1254-MB1/3.

K	PLC35	-	R1	1	-	V	11	-	25	-	Z	1
---	-------	---	----	---	---	---	----	---	----	---	---	---

Example

- [z] Add. cooling
 [0] Without add. cooling
 [1] 1 Fan
 [3] Cooling coil
 [4] 1 Fan + Cooling Coil

Nominal ratio

Location of shafts

Permissible direction of rotation

Output shaft

- [V] Solid shaft
 [G] Hollow shaft with shrink disc
 *) [H] Hollow shaft with key-way
 [F] Flange shaft

Mounting arrangement

- [0] Shaft mount. with torque arm
 [1] Foot mounted

[R1] Horizontal gear unit

Size

Bevel-helical gear unit, EP-Series, [LC] 3 stage

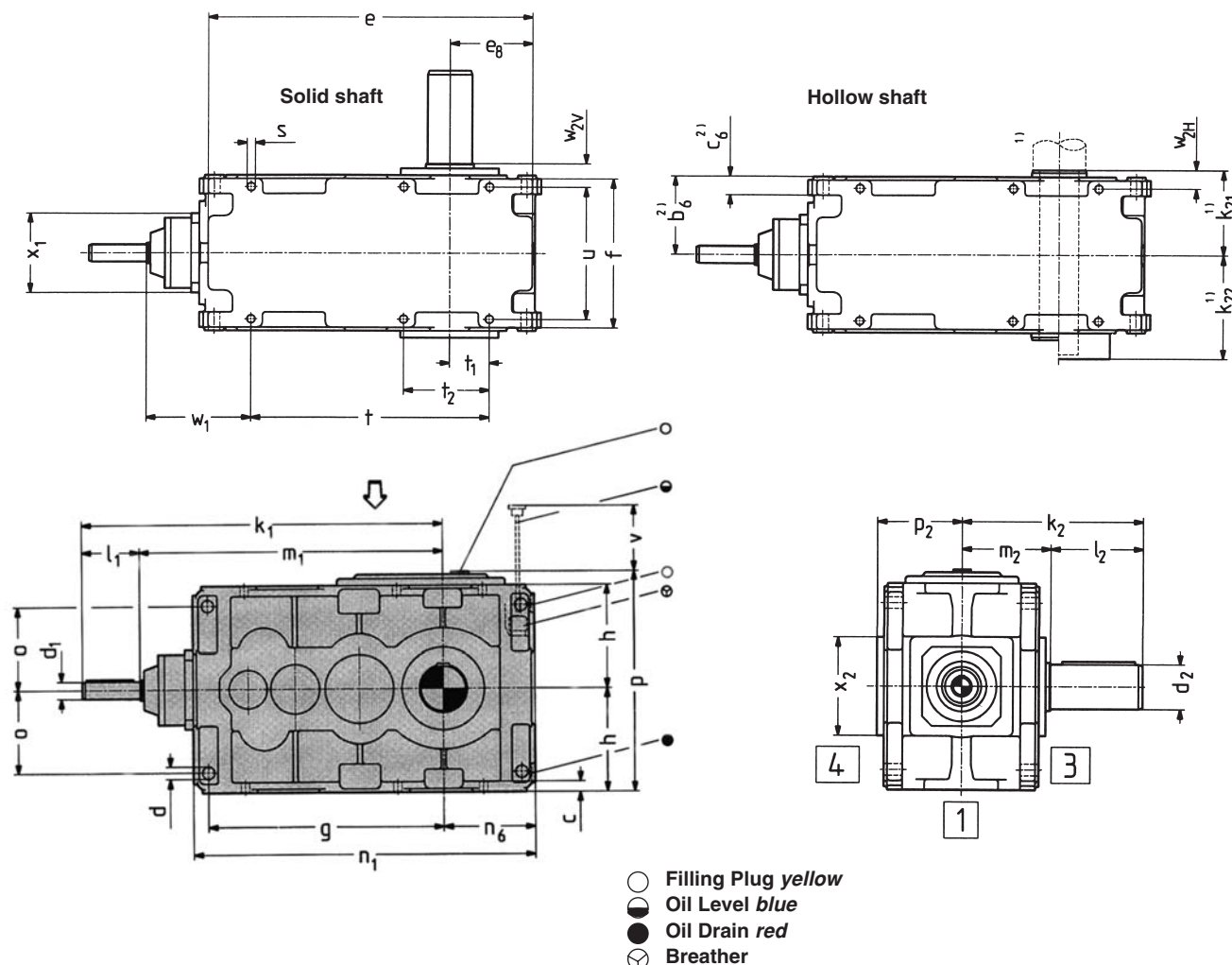
Motor attachment

- [K] Motor bell housing
 [M] Adjustable motor base
 [J] Motor bracket, base plate

*) Only types PLC35 and PLC40

Dimensions

Type PLD 14-R1 ... PLD 31-R1



Type	Input shaft					Output shaft					Weight [kg]	Oil filling [l]
	Ø d1 k6	k1	l1	m1	Ø x1	Ø d2 m6	k2	l2	m2	Ø x2		
PLD 14	20	552	80	472	148	65	270	135	135	-	105	6
PLD 16	20	608	80	528	148	85	290	145	145	-	170	9
PLD 18	25	703	85	618	190	95	350	170	180	-	245	15
PLD 20	25	757	85	672	190	120	370	190	180	-	335	20
PLD 22	40	908	120	788	225	130	405	190	215	-	465	28
PLD 25	40	966	120	846	225	145	450	230	220	296	600	36
PLD 28	40	1021	120	901	255	160	480	230	250	328	770	48
PLD 31	40	1089	120	969	255	175	540	290	250	348	1060	65

Tapped centre holes in shaft ends DIN 332 Form DS				
d1, d2				
20	25	40	65...85	> 85
M 6	M 10	M 16	M 20	M 24

Keys to DIN 6885/1 supplied by ELECON

Type of protection as per IP 55

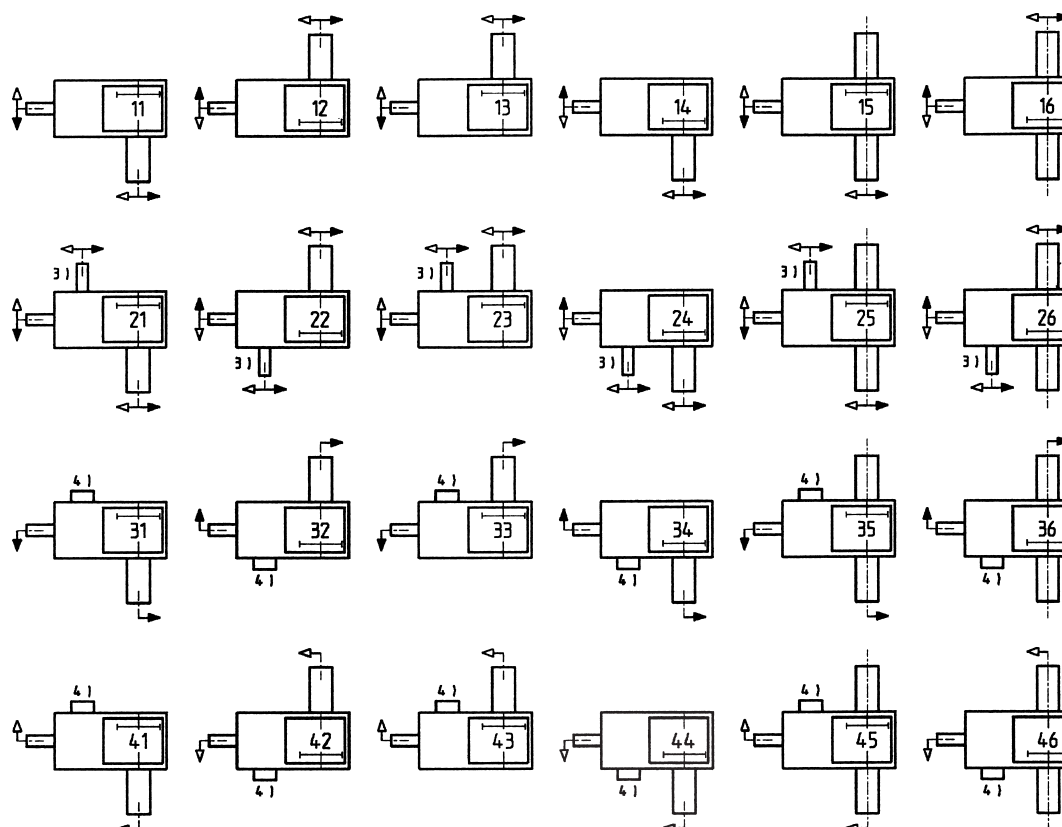
Type	b6	c	c6	$\varnothing d_{H9}$	e	e8	f	g	h -0.2	n1	n6	o	p	p2	Fitting		t	t1	t2	u	v	w1	w2v	w2H
															$\varnothing s$	ds x l max								
PLD 14	113	15	27	16	474	121	216	344	150	500	134	121	333	-	12	M10x45	348	58	125	192	25	182	39	27
PLD 16	113	15	27	16	579	170	216	400	180	605	183	151	393	-	12	M10x80	453	107	217	192	70	182	49	27
PLD 18	147	18	32	22	622	155	284	458	190	654	171	155	419	-	14.5	M12x55	486	87	175	248	35	219	56	33
PLD 20	147	18	32	22	732	211	284	511	225	764	227	190	489	-	14.5	M12x90	596	143	285	248	60	219	56	33
PLD 22	179	24	41	26	782	193	346	580	235	826	215	190	513	-	18.5	M16x65	622	113	226	306	50	279	62	36
PLD 25	179	24	41	26	896	249	346	638	265	940	271	220	573	204	18.5	M16x90	736	169	340	306	90	279	67	62
PLD 28	210	28	48	33	948	230	408	706	280	1000	256	227	610	246	24	M20x80	752	132	265	360	60	281	70	70
PLD 31	210	28	48	33	1085	299	408	773	315	1137	325	262	680	239	24	M20x110	889	201	402	360	70	281	70	70

1) Hollow shaft and machine shaft see dimensions 900-0212-MB 1 and 900-0213-MB1

2) Torque arms see dimensions 900-0253-MB1

Location of input and output shafts

Directions of rotation viewing ↷



3) Add. shaft extension, see 900-1200-...

4) Backstop, see 900-1254-MB1

K **P** **L** **D** **22** **-** **R** **1** **-** **V** **11** **-** **250** **-** **Z** **3**

Example

[z] Add. cooling
[0] Without add. cooling
[3] Cooling coil

Nominal ratio

Location of shafts
Permissible direction of rotation

Output shaft

[V] Solid shaft
[G] Hollow shaft with shrink disc
[H] Hollow shaft with key-way
[F] Flange shaft

Mounting arrangement

[0] Shaft mount. with torque arm
[1] Foot mounted
[3] Wall mounted
[4] Wall mounted

[R1] Horizontal gear unit

Size

Bevel-helical gear unit, EP-Series, 4 stage

Motor attachment

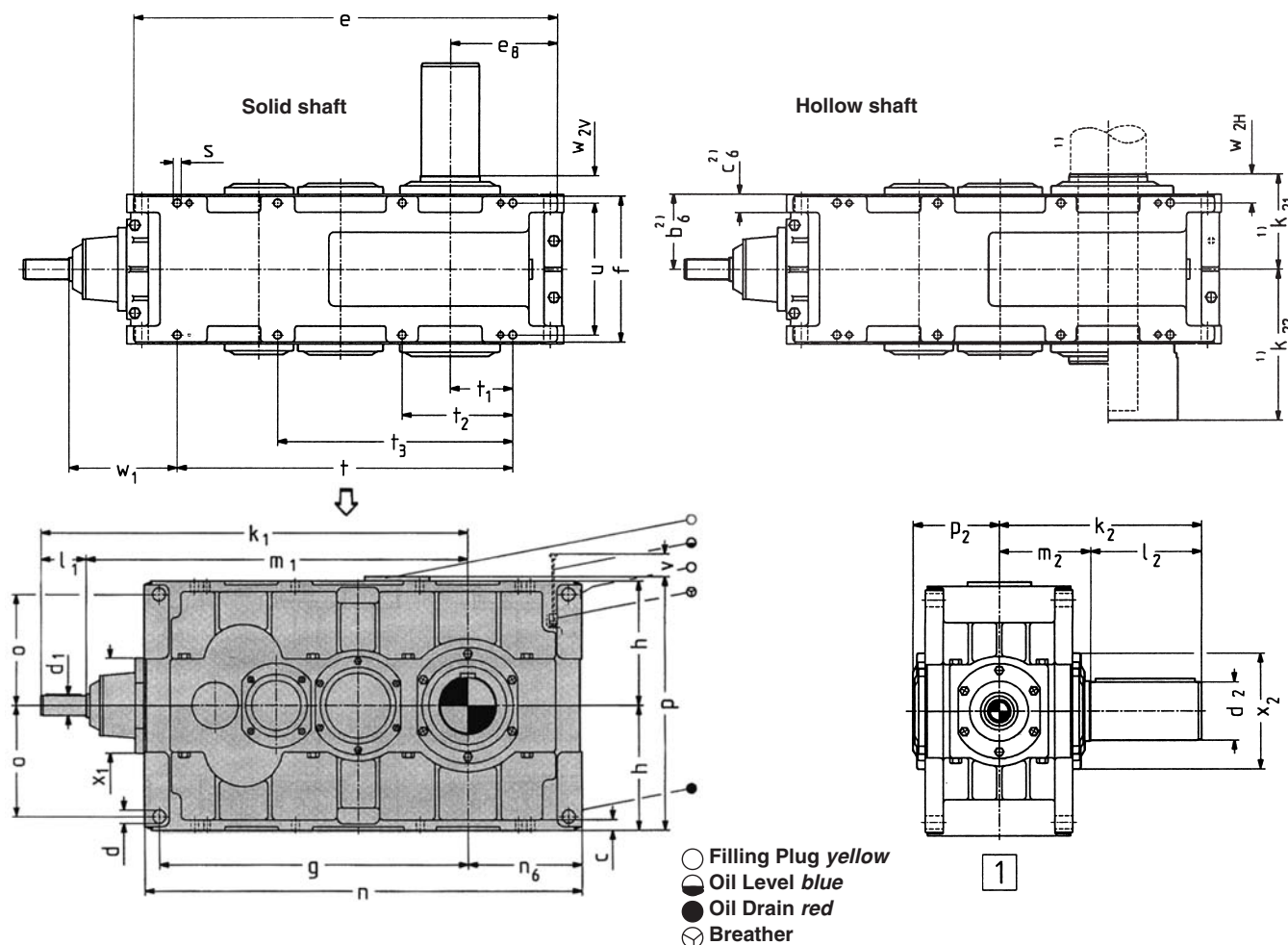
[K] Motor bell housing
[M] Adjustable motor base
[J] Motor bracket, base plate

5) See dimension sheet 900-0220-MB9

Dimensions

3.99

Type PLD 35-R1 ... PLD 67-R1



Type	Input shaft					Output shaft					Weight [kg]	Oil filling [l]
	Ø d1 m6	k1	l1	m1	Ø x1	Ø d2 m6	k2	l2	m2	Ø x2		
PLD 35	50 _{k6}	1188	120	1068	285	155	570	290	280	328	1500	60
PLD 40	50 _{k6}	1265	120	1145	285	175	570	290	280	348	1830	80
PLD 42	60	1416	145	1271	350	195	650	330	320	400	2200	100
PLD 45	60	1482	145	1337	350	210	730	410	320	440	2750	140
PLD 47	60	1568	145	1423	350	230	730	410	320	440	3300	190
PLD 50	75	1748	160	1588	440	250	795	410	385	480	4200	200
PLD 53	75	1819	160	1659	440	250	795	410	385	480	4800	260
PLD 56	75	1912	160	1752	440	270	845	460	385	540	5850	360
PLD 60	85	2096	180	1916	540	290	920	460	460	540	7350	380
PLD 63	85	2169	180	1989	540	310	970	510	460	580	8350	480
PLD 67	85	2240	180	2060	540	310	970	510	460	580	9400	580

d1, d2	50	60...85	≥ 155
Tapped centre holes in shaft ends DIN 332 Form DS	M 16	M 20	M 24

Keys to DIN 6885/1 supplied by ELECON

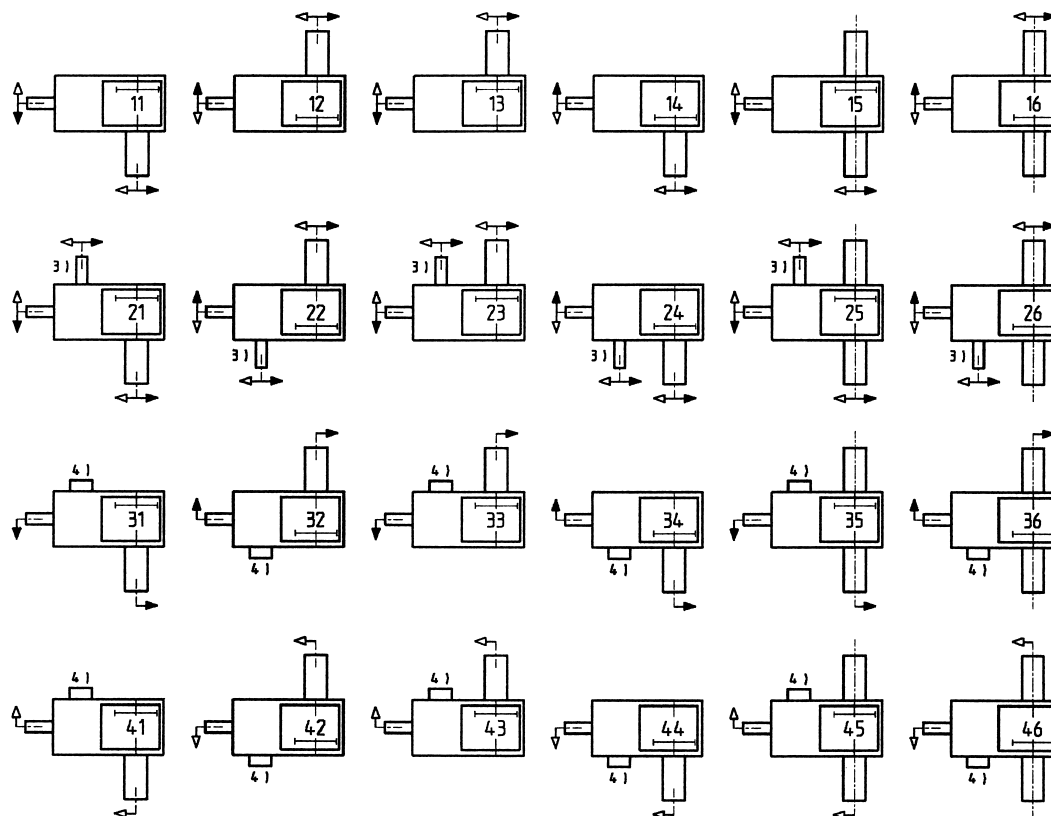
Type of protection as per IP 55

Type	b ₆	c	c ₆	∅ _{dH9}	e	e ₈	f	g	h _{-0.2}	n	n ₆	o	p	p ₂	Fitting		t	t ₁	t ₂	t ₃	u	v	W ₁	W _{2v}	W _{2H}
															∅ s	d _s x l _{max}									
PLD 35	225	32	55	40	1275	325	438	925	300	1315	345	255	610	262	24	M20x85	1005	190	325	695	396	190	253	82	87
PLD 40	225	32	55	40	1430	403	438	1002	375	1470	423	330	760	262	24	M20x120	1157	265	477	847	396	220	253	82	87
PLD 42	265	40	62	45	1555	392	514	1134	355	1615	422	305	720	303	28	M24x100	1230	225	390	820	460	250	266	90	85
PLD 45	265	40	62	45	1689	460	514	1200	425	1749	490	375	860	303	28	M24x120	1356	285	516	946	460	250	266	90	90
PLD 47	265	40	62	52	1860	545	514	1285	500	1920	575	440	1010	303	28	M24x250	1527	370	687	1117	460	250	266	90	100
PLD 50	320	50	75	60	1892	470	620	1392	425	1962	505	360	860	358	35	M30x120	1524	280	504	1014	560	250	344	105	110
PLD 53	320	50	75	60	2038	545	620	1463	500	2108	580	435	1010	358	35	M30x180	1670	355	650	1160	560	250	344	105	110
PLD 56	320	50	75	60	2231	645	620	1556	600	2301	680	535	1210	365	35	M30x250	1858	450	838	1348	560	250	344	105	110
PLD 60	395	60	90	65	2272	565	770	1669	530	2342	600	460	1070	440	42	M36x150	1840	345	630	1200	690	350	421	115	120
PLD 63	395	60	90	65	2420	640	770	1742	600	2490	675	530	1210	440	42	M36x200	1988	420	778	1348	690	350	421	115	120
PLD 67	395	60	90	70	2566	715	770	1806	670	2636	750	590	1350	440	42	M36x250	2134	495	924	1494	690	350	421	115	120

- 1) Hollow shaft and machine shaft see dimensions 900-0212-MB 1 and 900-0213-MB1
- 2) Torque arms see dimensions 900-0253-MB1
- 3) Holding down bolts of min. property class 10.9.
- 4) Available for shaft d_1 ; $n \geq 1000 \text{ mm}^{-1}$, lower speed on request.

Location of input and output shafts

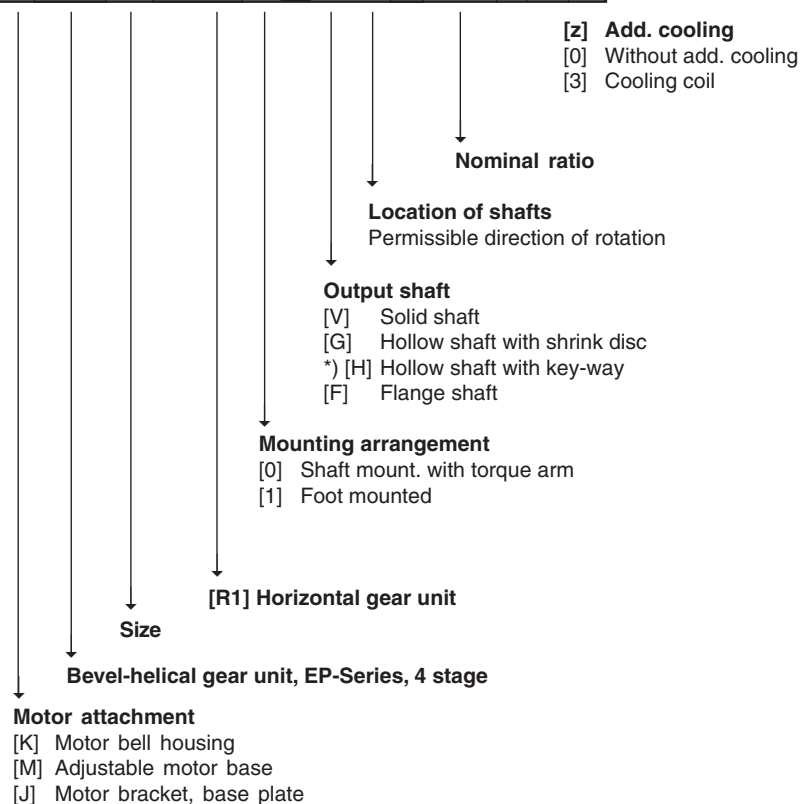
Directions of rotation viewing ↻



- 3) Add. shaft extension
4) Backstop, see 900-1254-MB1

K **PLD35** **-** **R1** **1** **-** **V** **11** **-** **250** **-** **Z** **3**

Example

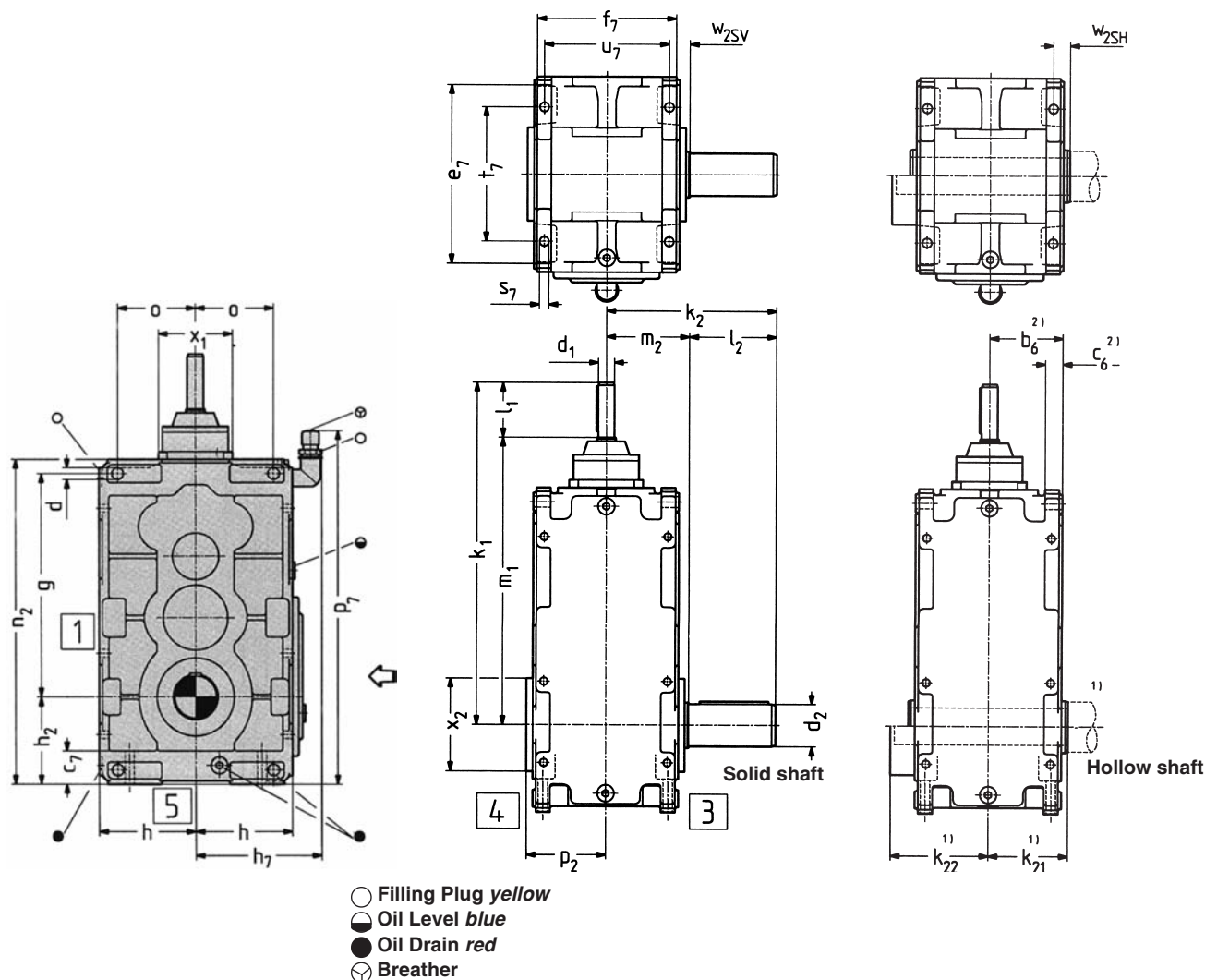


*) Only types PLD35 and PLD40

Dimensions

Type **PLC 14-S5 ... PLC 31-S5**

Add. lubrication required, please check-back



Type	Input shaft					Output shaft					Weight [kg]	Oil filling [l]
	Ø d ₁	k ₁	l ₁	m ₁	Ø x ₁	Ø d ₂ m6	k ₂	l ₂	m ₂	Ø x ₂		
PLC 14	25 k6	528	85	443	148	65	270	135	135	-	115	10
PLC 16	25 k6	584	85	499	148	85	290	145	145	-	170	16
PLC 18	40 k6	699	120	579	190	95	350	170	180	-	245	24
PLC 20	40 k6	753	120	633	190	120	370	190	180	-	335	33
PLC 22	50 k6	823	120	703	225	130	405	190	215	-	460	44
PLC 25	50 k6	881	120	761	225	145	450	230	220	296	595	59
PLC 28	60 m6	986	145	841	255	160	480	230	250	328	775	74
PLC 31	60 m6	1054	145	909	255	175	540	290	250	348	1065	107

Tapped centre holes in shaft ends
DIN 332 Form DS

d ₁ , d ₂			
25	40...50	60...85	> 85
M 10	M 16	M 20	M 24

Keys to DIN 6885/1 supplied by ELECON

Type of protection as per IP 55

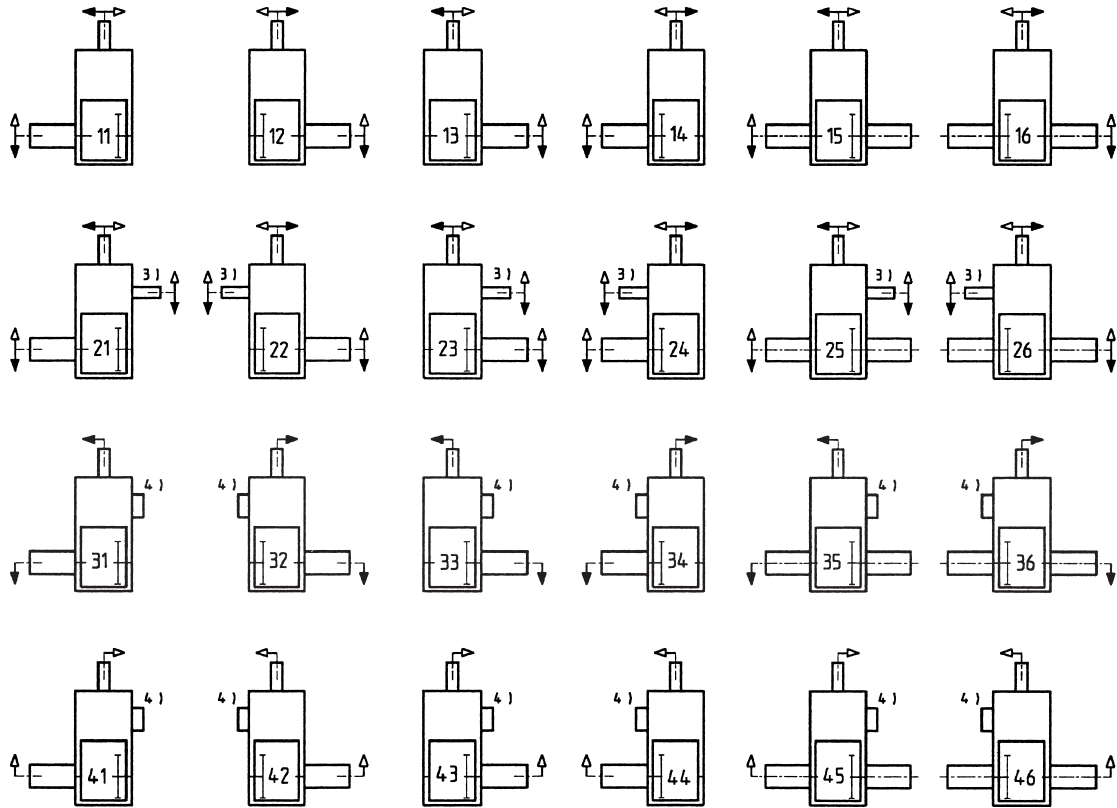
Type	b ₆ -0.2	c ₆	c ₇	Ø d H9	e ₇	f ₇	g	h -0.2	h ₂ -0.2	h ₇	n ₂	o	p ₂	p ₇	Fitting Ø s ₇ ds x l _{max}	t ₇	u ₇	w _{2sv}	w _{2sh}
PLC 14	113	27	51	16	274	216	344	150	134	195	500	121	-	535	14.5 M12x90	206	194	38	26
PLC 16	113	27	51	16	334	216	400	180	183	225	605	151	-	640	14.5 M12x90	266	194	48	26
PLC 18	147	32	62	22	348	284	458	190	171	245	654	155	-	690	16.5 M14x100	260	258	51	28
PLC 20	147	32	62	22	414	284	511	225	227	280	764	190	-	795	16.5 M14x100	330	258	51	28
PLC 22	179	41	76	26	426	346	580	235	215	305	826	190	-	865	24 M20x130	326	312	59	33
PLC 25	179	41	77	26	486	346	638	265	271	335	940	220	204	980	24 M20x130	384	312	64	59
PLC 28	210	48	86	33	504	408	706	280	256	360	1000	227	246	1030	28 M24x150	386	366	67	67
PLC 31	210	48	95	33	574	408	773	315	325	395	1137	262	239	1165	28 M24x160	456	366	67	67

1) Hollow shaft and machine shaft see dimensions 900-0212-MB 1 and 900-0213-MB1

2) Torque arms see dimensions 900-0253-MB1

Location of input and output shafts

Directions of rotation viewing ↔



- 3) Add. shaft extension (900-1200-...)
- 4) Backstop, see 900-1254-MB1

KPLC22

-

S5

4

-

V

11

-

25

-

Z

0

Example

[z] Add. cooling

[0] Without add. cooling

Nominal ratio

Location of shafts

Permissible direction of rotation

Output shaft

[V] Solid shaft

[G] Hollow shaft with shrink disc

[H] Hollow shaft with key-way

[F] Flange shaft

Mounting arrangement 5)

[0] Shaft mount. with torque arm

[1] Wall mounted

[3] Wall mounted

[4] Wall mounted

[5] Foot mounted

[S5] Vertical mounting gear unit with right angle shafts, high speed shaft at the top

Size

Bevel-helical gear unit EP-Series, [LC] 3 stage

Motor attachment

[K] Motor bell housing

[M] Adjustable motor base

[J] Motor bracket, base plate

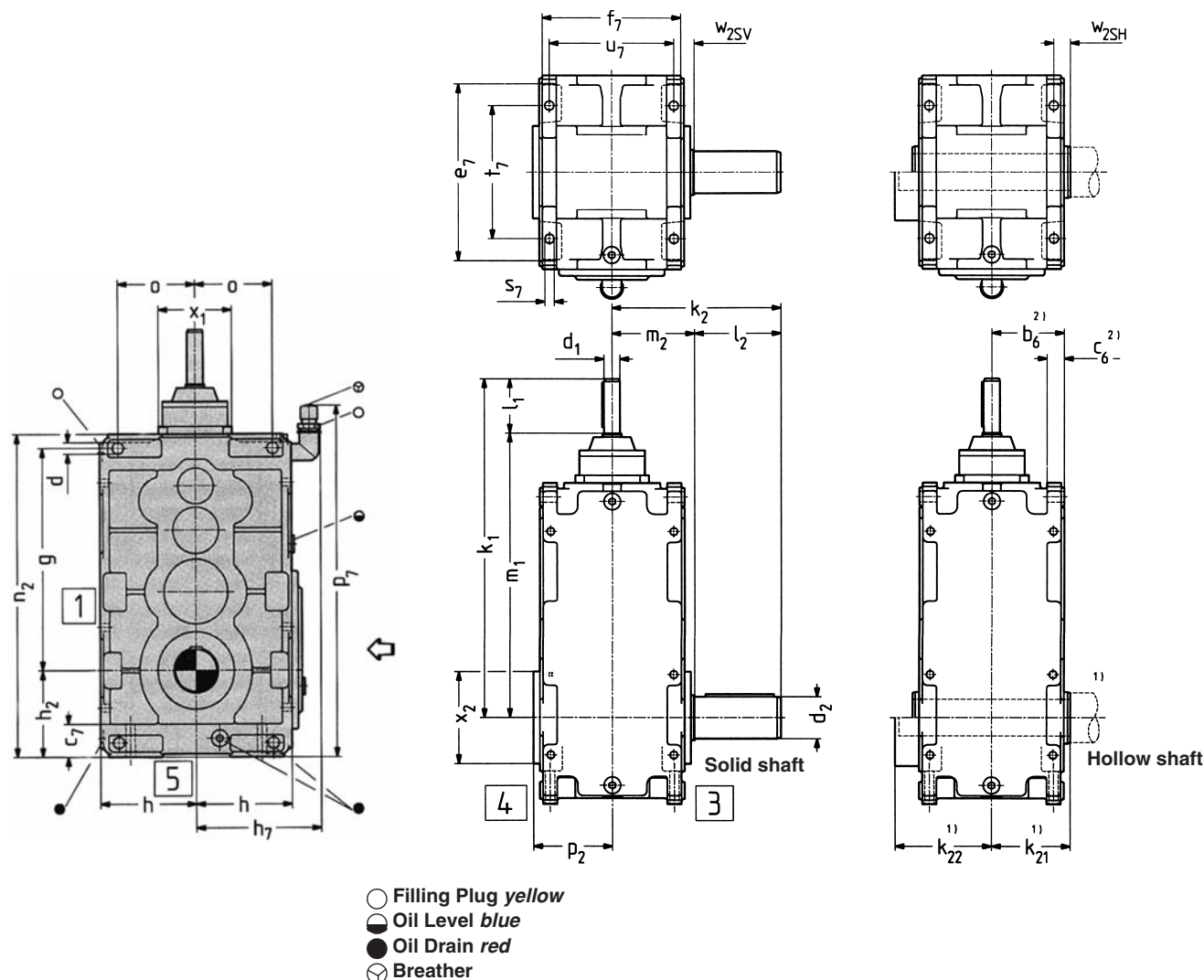
5) See dimension sheet 900-0220-MB9

Dimensions

Type

PLD 14-S5 ... PLD 31-S5

Add. lubrication required, please check-back



Type	Input shaft					Output shaft					Weight [kg]	Oil filling [l]
	Ø d ₁ k ₆	k ₁	l ₁	m ₁	Ø x ₁	Ø d ₂ m ₆	k ₂	l ₂	m ₂	Ø x ₂		
PLD 14	20	552	80	472	148	65	270	135	135	-	105	13
PLD 16	20	608	80	528	148	85	290	145	145	-	170	19
PLD 18	25	703	85	618	190	95	350	170	180	-	245	32
PLD 20	25	757	85	672	190	120	370	190	180	-	335	41
PLD 22	40	908	120	788	225	130	405	190	215	-	465	58
PLD 25	40	966	120	846	225	145	450	230	220	296	600	75
PLD 28	40	1021	120	901	255	160	480	230	250	328	770	98
PLD 31	40	1089	120	969	255	175	540	290	250	348	1060	135

Tapped centre holes in shaft ends DIN 332 Form DS				
d ₁ , d ₂				
20	25	40	65...85	> 85
M 6	M 10	M 16	M 20	M 24

Keys to DIN 6885/1 supplied by ELECON

Type of protection as per IP 55

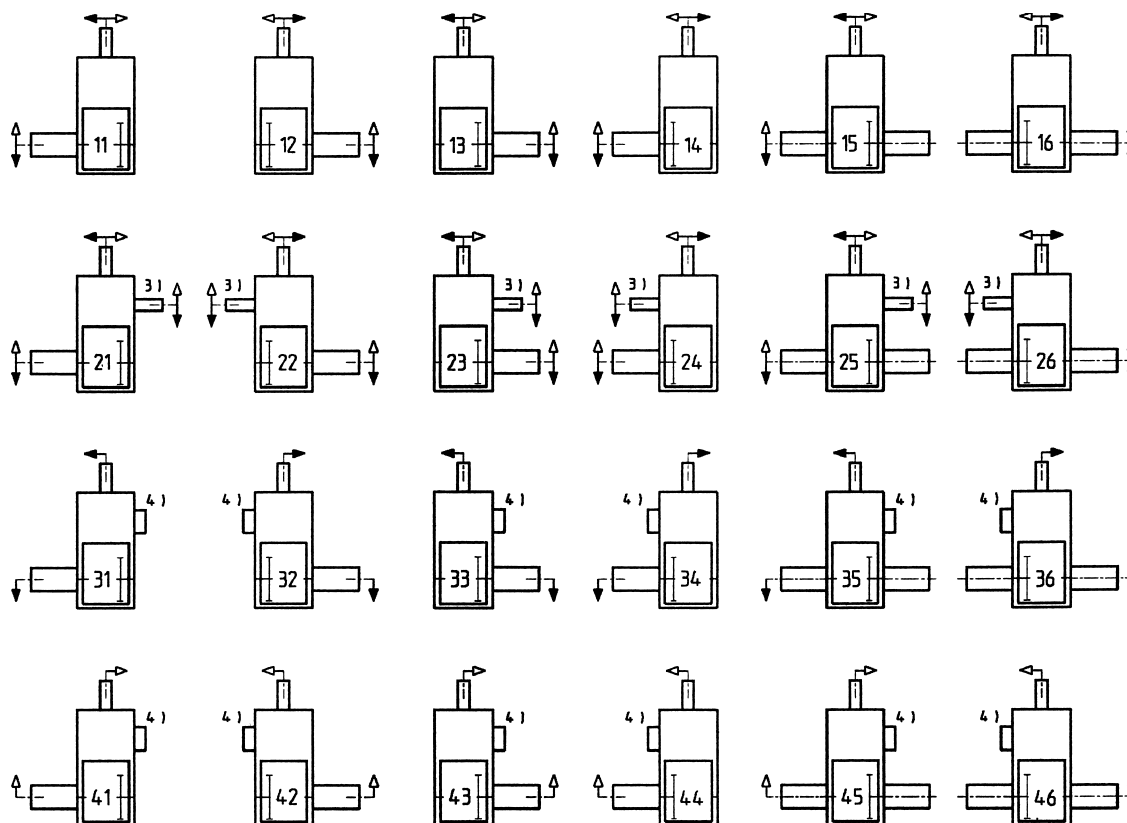
Type	b ₆ -0.2	c ₆	c ₇	Ø d _{H9}	e ₇	f ₇	g	h -0.2	h ₂ -0.2	h ₇	n ₂	o	p ₂	p ₇	Fitting Ø s ₇ d _s x l _{max}	t ₇	u ₇	W _{2sv}	W _{2SH}
PLD 14	113	27	51	16	274	216	344	150	134	195	500	121	-	535	14.5 M12x90	206	194	38	26
PLD 16	113	27	51	16	334	216	400	180	183	225	605	151	-	640	14.5 M12x90	266	194	48	26
PLD 18	147	32	62	22	348	284	458	190	171	245	654	155	-	690	16.5 M14x100	260	258	51	28
PLD 20	147	32	62	22	414	284	511	225	227	280	764	190	-	795	16.5 M14x100	330	258	51	28
PLD 22	179	41	76	26	426	346	580	235	215	305	826	190	-	865	24 M20x130	326	312	59	33
PLD 25	179	41	77	26	486	346	638	265	271	335	940	220	204	980	24 M20x130	384	312	64	59
PLD 28	210	48	86	33	504	408	706	280	256	360	1000	227	246	1030	28 M24x150	386	366	67	67
PLD 31	210	48	95	33	574	408	773	315	325	395	1137	262	239	1165	28 M24x160	456	366	67	67

1) Hollow shaft and machine shaft see dimensions 900-0212-MB 1 and 900-0213-MB1

2) Torque arms see dimensions 900-0253-MB1

Location of input and output shafts

Directions of rotation viewing ↔



3) Add. shaft extension (900-1200-...)

4) Backstop, see 900-1254-MB1

KPLD22 - S5 1 - V 11 - 250 - Z 0

Example

[z] Add. cooling
[0] Without add. cooling

Nominal ratio

Location of shafts
Permissible direction of rotation

Output shaft

[V] Solid shaft
[G] Hollow shaft with shrink disc
[H] Hollow shaft with key-way
[F] Flange shaft

Mounting arrangement 5)

[0] Shaft mount. with torque arm
[1] Wall mounted
[3] Wall mounted
[4] Wall mounted
[5] Foot mounted

[S5] Vertical mounting gear unit with right angle shafts, high speed shaft at the top

Size

Bevel-helical gear unit EP-Series, [LD] 4 stage

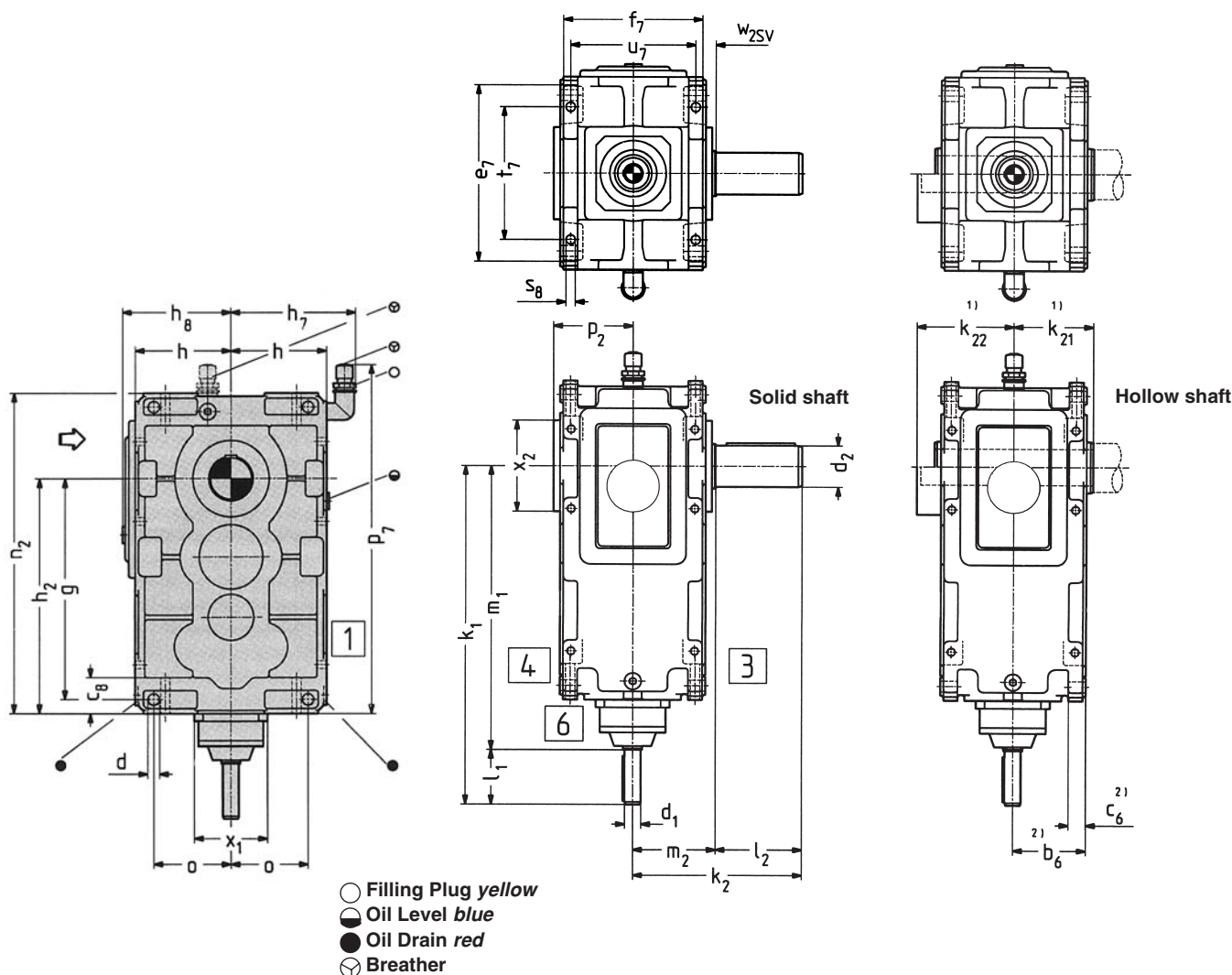
Motor attachment

[K] Motor bell housing
[M] Adjustable motor base
[J] Motor bracket, base plate

5) See dimension sheet 900-0220-MB9

Dimensions

Type PLC 14-T6 ... PLC 31-T6



Type	Input shaft					Output shaft					Weight [kg]	Oil filling [l]
	$\varnothing d_1$	k_1	l_1	m_1	$\varnothing x_1$	$\varnothing d_2$ m6	k_2	l_2	m_2	$\varnothing x_2$		
PLC 14	25 k6	528	85	443	148	65	270	135	135	-	115	9
PLC 16	25 k6	584	85	499	148	85	290	145	145	-	170	14
PLC 18	40 k6	699	120	579	190	95	350	170	180	-	245	24
PLC 20	40 k6	753	120	633	190	120	370	190	180	-	335	30
PLC 22	50 k6	823	120	703	225	130	405	190	215	-	460	45
PLC 25	50 k6	881	120	761	225	145	450	230	220	296	595	56
PLC 28	60 m6	986	145	841	255	160	480	230	250	328	775	77
PLC 31	60 m6	1054	145	909	255	175	540	290	250	348	1065	100

Tapped centre holes in shaft ends DIN 332 Form DS			
d_1, d_2			
25	40...50	60...85	> 85
M 10	M 16	M 20	M 24

Keys to DIN 6885/1 supplied by ELECON

Type of protection as per IP 55

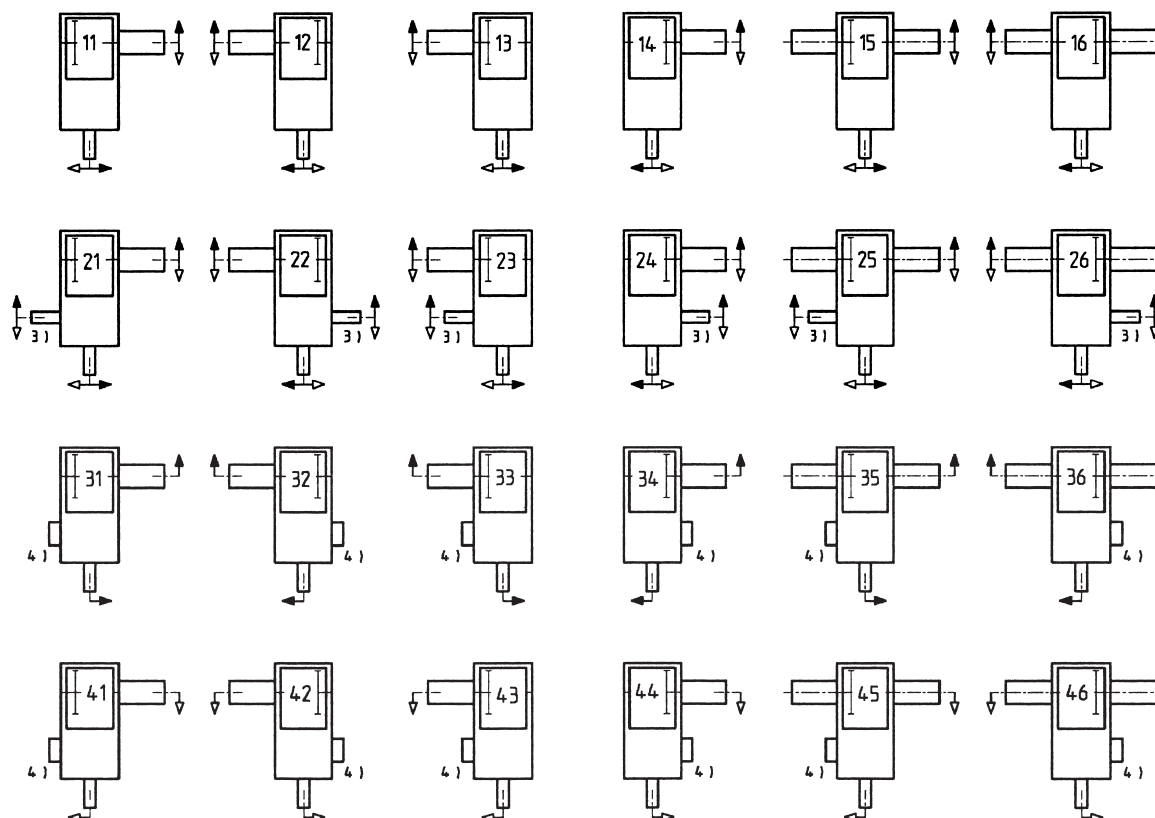
Type	b_6 -0.2	c_6	c_8	$\varnothing d_{H9}$	e_7	f_7	g	h -0.2	h_2 -0.2	h_7	h_8	n_2	o	p_2	p_7	Fitting		t_7	u_7	w_{2sv}	w_{2sh}
																$\varnothing s_8$	$d_s \times l_{max}$				
PLC 14	113	27	57	16	274	216	344	150	366	195	183	500	121	-	535	14.5	M12x90	206	194	38	26
PLC 16	113	27	57	16	334	216	400	180	422	225	213	605	151	-	640	14.5	M12x90	266	194	48	26
PLC 18	147	32	64	22	348	284	458	190	483	245	229	654	155	-	690	16.5	M14x100	260	258	51	28
PLC 20	147	32	64	22	414	284	511	225	537	280	264	764	190	-	795	16.5	M14x100	330	258	51	28
PLC 22	179	41	76	26	426	346	580	235	611	305	278	826	190	-	865	24	M20x130	326	312	59	33
PLC 25	179	41	77	26	486	346	638	265	669	335	308	940	220	204	980	24	M20x130	384	312	64	59
PLC 28	210	48	92	33	504	408	706	280	744	360	330	1000	227	246	1030	28	M24x150	386	366	67	67
PLC 31	210	48	95	33	574	408	773	315	812	395	365	1137	262	239	1165	28	M24x160	456	366	67	67

1) Hollow shaft and machine shaft see dimensions 900-0212-MB 1 and 900-0213-MB1

2) Torque arms see dimensions 900-0253-MB1

Location of input and output shafts

Directions of rotation viewing ↷



3) Add. shaft extension (900-1200-...)

4) Backstop, see 900-1254-MB1

K PLC 22 - T6 6 - V 11 - 25 - Z 0

Example

[z] Add. cooling
[0] Without add. cooling

Nominal ratio

Location of shafts
Permissible direction of rotation

Output shaft

[V] Solid shaft
[G] Hollow shaft with shrink disc
[H] Hollow shaft with key-way
[F] Flange shaft

Mounting arrangement 5)

[0] Shaft mount. with torque arm
[1] Wall mounted
[3] Wall mounted
[4] Wall mounted
[6] Foot mounted

[T6] Vertical mounting gear unit with right angle shafts, high speed shaft downward

Size

Bevel-helical gear unit EP-Series, [LC] 3 stage

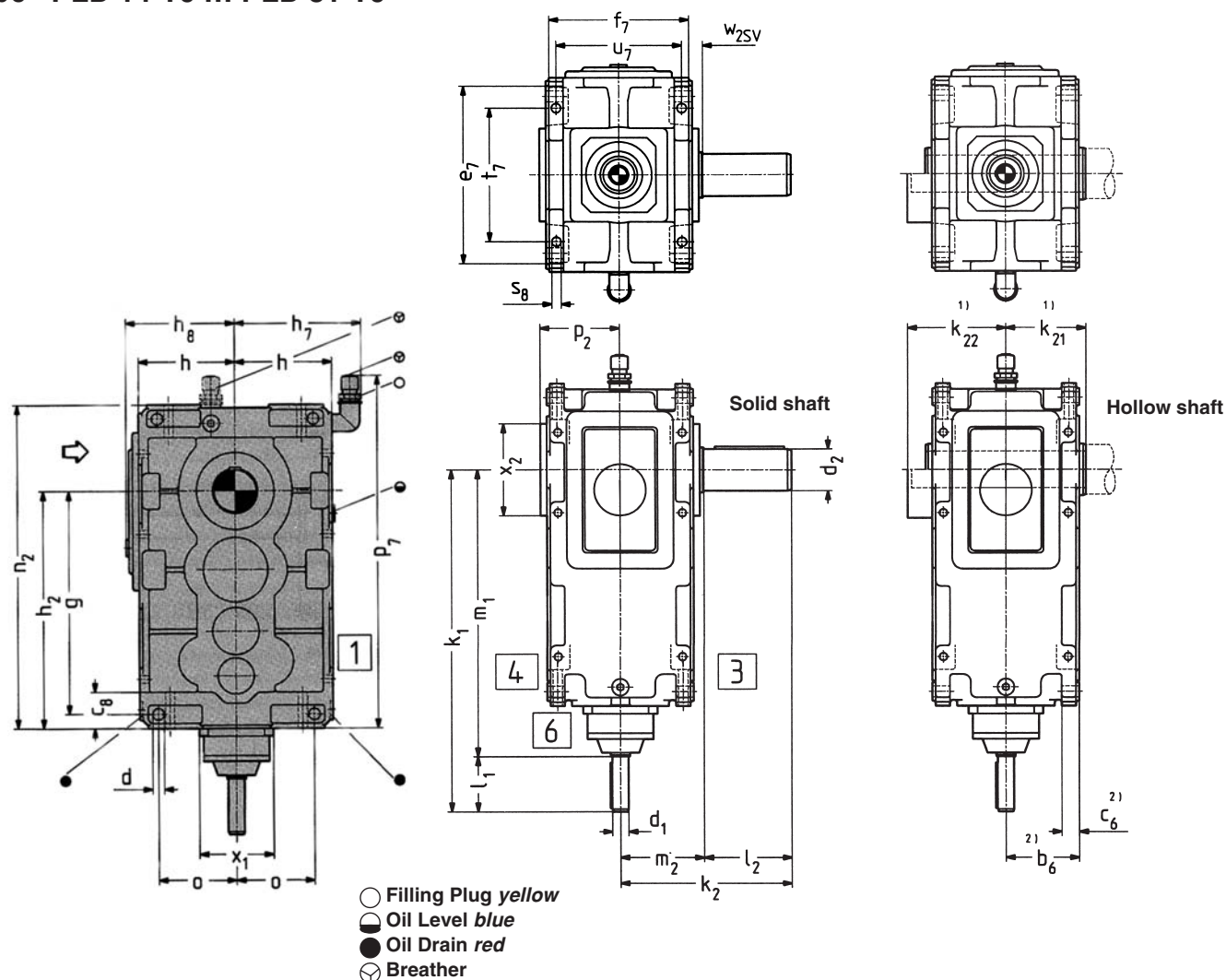
Motor attachment

[K] Motor bell housing
[M] Adjustable motor base
[J] Motor bracket, base plate

5) See dimension sheet 900-0220-MB9

Dimensions

Type PLD 14-T6 ... PLD 31-T6



Type	Input shaft					Output shaft					Weight [kg]	Oil filling [l]
	Ø d ₁ k ₆	k ₁	l ₁	m ₁	Ø x ₁	Ø d ₂ m ₆	k ₂	l ₂	m ₂	Ø x ₂		
PLD 14	20	552	80	472	148	65	270	135	135	-	105	9
PLD 16	20	608	80	528	148	85	290	145	145	-	170	14
PLD 18	25	703	85	618	190	95	350	170	180	-	245	23
PLD 20	25	757	85	672	190	120	370	190	180	-	335	30
PLD 22	40	908	120	788	225	130	405	190	215	-	465	45
PLD 25	40	966	120	846	225	145	450	230	220	296	600	55
PLD 28	40	1021	120	901	255	160	480	230	250	328	770	76
PLD 31	40	1089	120	969	255	175	540	290	250	348	1060	100

Tapped centre holes in shaft ends DIN 332 Form DS				
d ₁ , d ₂				
20	25	40	65...85	> 85
M 6	M 10	M 16	M 20	M 24

Keys to DIN 6885/1 supplied by ELECON

Type of protection as per IP 55

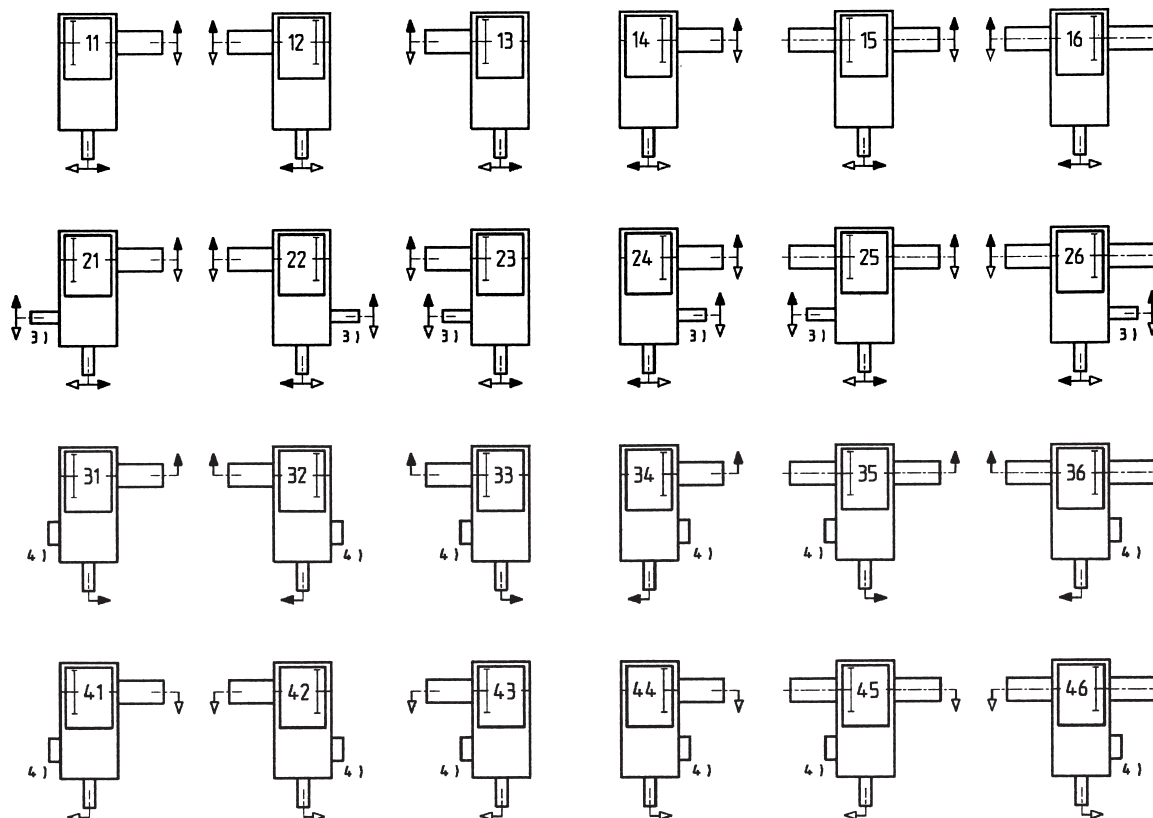
Type	b ₆ -0.2	c ₆	c ₈	Ø d _{H9}	e ₇	f ₇	g	h -0.2	h ₂ -0.2	h ₇	h ₈	n ₂	o	p ₂	p ₇	Fitting		t ₇	u ₇	w _{2SV}	w _{2SH}
																Ø s ₈	d _s x l _{max}				
PLD 14	113	27	57	16	274	216	344	150	366	195	183	500	121	-	535	14.5	M12x90	206	194	38	26
PLD 16	113	27	57	16	334	216	400	180	422	225	213	605	151	-	640	14.5	M12x90	266	194	48	26
PLD 18	147	32	64	22	348	284	458	190	483	245	229	654	155	-	690	16.5	M14x100	260	258	51	28
PLD 20	147	32	64	22	414	284	511	225	537	280	264	764	190	-	795	16.5	M14x100	330	258	51	28
PLD 22	179	41	76	26	426	346	580	235	611	305	278	826	190	-	865	24	M20x130	326	312	59	33
PLD 25	179	41	77	26	486	346	638	265	669	335	308	940	220	204	980	24	M20x130	384	312	64	59
PLD 28	210	48	92	33	504	408	706	280	744	360	330	1000	227	246	1030	28	M24x150	386	366	67	67
PLD 31	210	48	95	33	574	408	773	315	812	395	365	1137	262	239	1165	28	M24x160	456	366	67	67

1) Hollow shaft and machine shaft see dimensions 900-0212 MB 1 and 900-0213-MB1

2) Torque arms see dimensions 900-0253-MB1

Location of input and output shafts

Directions of rotation viewing ↻

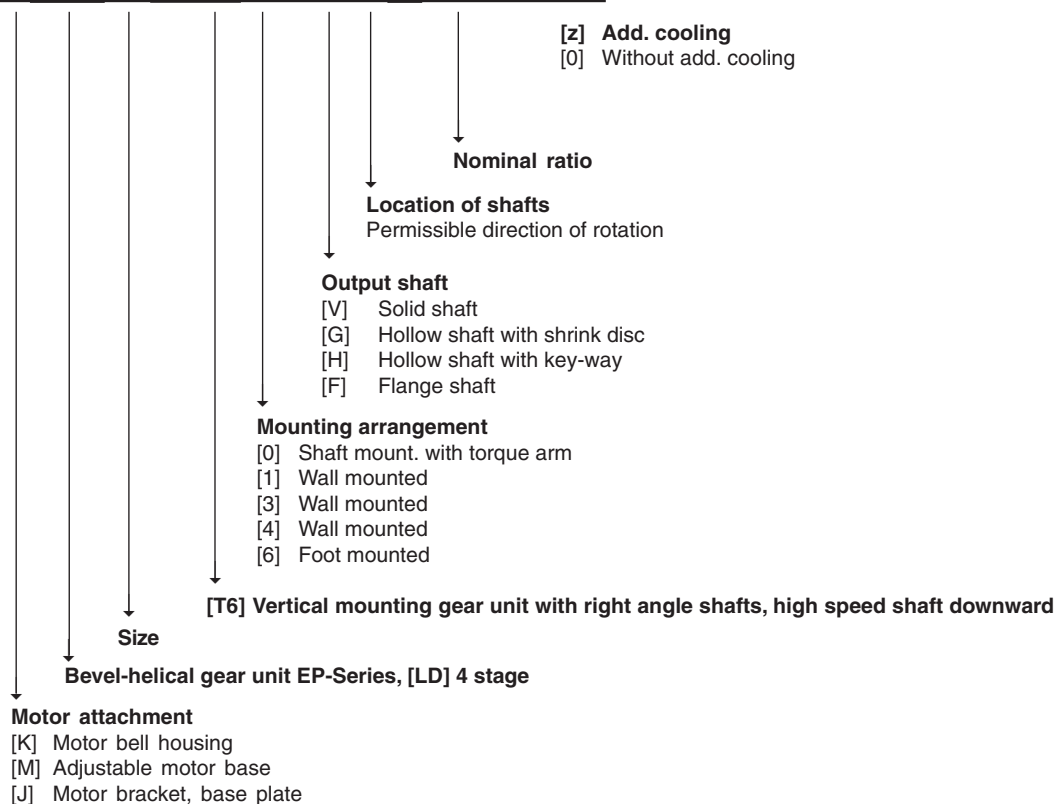


3) Add. shaft extension (900-1200-...)

4) Backstop, see 900-1254-MB1

KPLD22 - T6 4 - V 11 - 250 - Z 0

Example

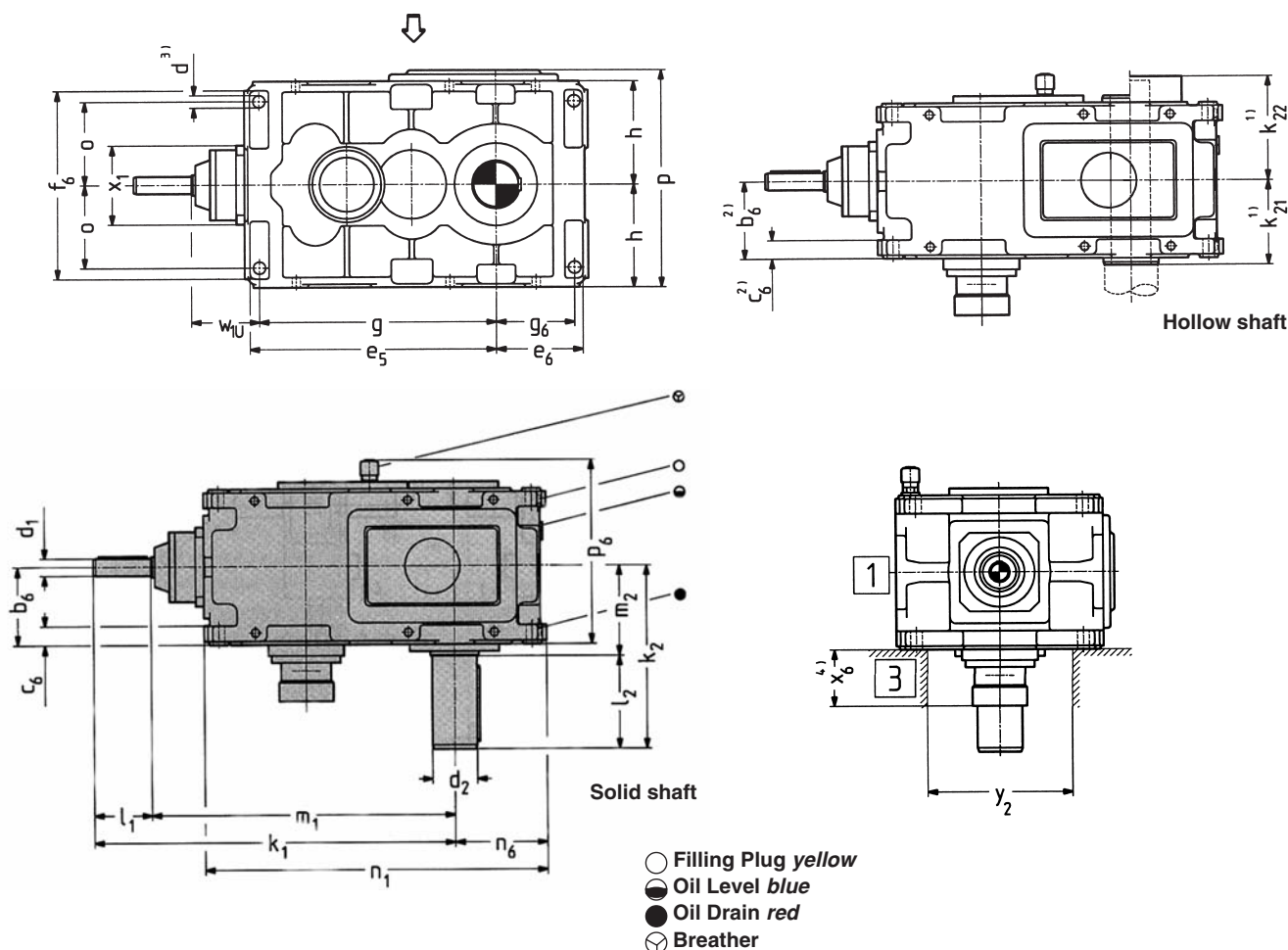


5) See dimension sheet 900-0220-MB9

Dimensions

Type PLC 14-U3 ... PLC 31-U3

Add. lubrication required, please check-back



Type	Input shaft					Output shaft						Weight [kg]	Oil filling [l]
	Ø d ₁	k ₁	l ₁	m ₁	Ø x ₁	Ø d ₂ m6	k ₂	l ₂	m ₂	Ø x ₂	y ₂		
PLC 14	25 k6	528	85	443	148	65	270	135	135	-	210	125	10
PLC 16	25 k6	584	85	499	148	85	290	145	145	-	270	180	15
PLC 18	40 k6	699	120	579	190	95	350	170	180	-	270	255	26
PLC 20	40 k6	753	120	633	190	120	370	190	180	-	340	345	34
PLC 22	50 k6	823	120	703	225	130	405	190	215	-	330	470	48
PLC 25	50 k6	881	120	761	225	145	450	230	220	-	390	605	52
PLC 28	60 m6	986	145	841	255	160	480	230	250	-	400	785	82
PLC 31	60 m6	1054	145	909	255	175	540	290	250	-	470	1075	93

Tapped centre holes in shaft ends DIN 332 Form DS			
d ₁ , d ₂			
25	40...50	60...85	> 85
M 10	M 16	M 20	M 24

Keys to DIN 6885/1 supplied by ELECON

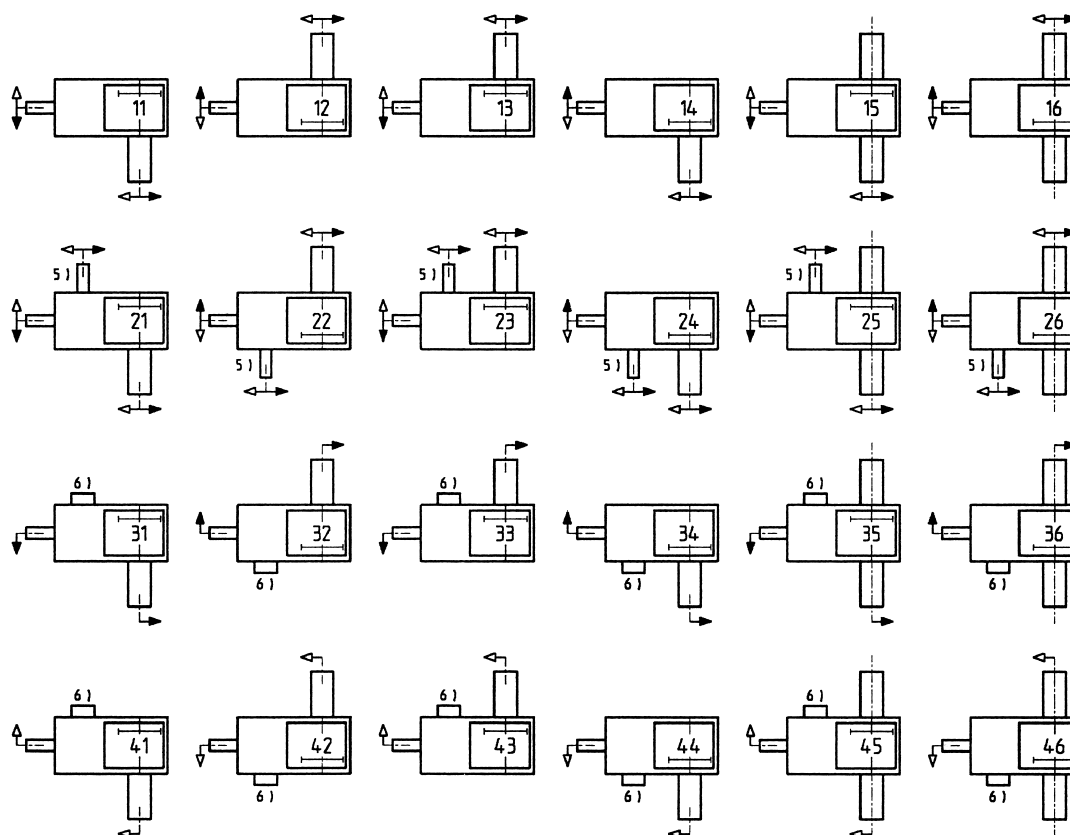
Type of protection as per IP 55

Type	b _{-0.2} 6	c ₆	e ₅	e ₆	f ₆	g	g ₆	h _{-0.2}	n ₁	n ₆	o	p	p ₂	P ₆	Fitting		W _{1U}	x ₆
															Ø dH ₉	d _s x l _{max} 3)		
PLC 14	113	27	357	126	274	344	113	150	500	134	121	333	-	270	16	M14x65	99	130
PLC 16	113	27	413	175	334	400	162	180	605	183	151	313	-	270	16	M14x65	99	130
PLC 18	147	32	475	162	348	458	145	190	654	171	155	419	-	340	22	M20x80	121	130
PLC 20	147	32	528	218	418	511	201	225	764	227	190	489	-	340	22	M20x80	122	130
PLC 22	179	41	600	200	426	580	180	235	826	215	190	513	-	416	26	M24x100	123	130
PLC 25	179	41	658	256	486	638	236	265	940	271	220	573	204	416	26	M24x100	123	130
PLC 28	210	48	731	245	508	706	221	280	1000	256	227	610	246	480	33	M30x120	135	130
PLC 31	210	48	798	307	578	773	282	315	1137	325	262	680	239	480	33	M30x120	135	130

1. Dimensions of hollow shaft and machine shaft on request
2. Torque arms see dimensions 900-253-MB1
3. Holding down bolts of min. property class10.9
4. Available for shaft d₁ : n ≥ 1000 min⁻¹ lower speed on request

Location of input and output shafts

Directions of rotation viewing ↻



3) Add. shaft extension (900-1200-...)

4) Backstop, see 900-1254-MB1

K PLC 22 - U3 3 - V 11 - 25 - Z 3

Example

- [z] Add. cooling
- [0] Without add. cooling
- [1] 1 Fan
- [3] Cooling coil
- [4] 1 Fan + Cooling coil

Nominal ratio

Location of shafts
Permissible direction of rotation

Output shaft

- [V] Solid shaft
- [G] Hollow shaft with shrink disc
- [H] Hollow shaft with key-way
- [F] Flange shaft

Mounting arrangement 8)

- [0] Shaft mount. with torque arm
- [1] Wall mounted
- [3] Foot mounted

[U3] Vertical gear unit

Size

Bevel-helical gear unit, EP-Series, [LC] 3 stage

Motor attachment

- [K] Motor bell housing
- [M] Adjustable motor base
- [J] Motor bracket, base plate

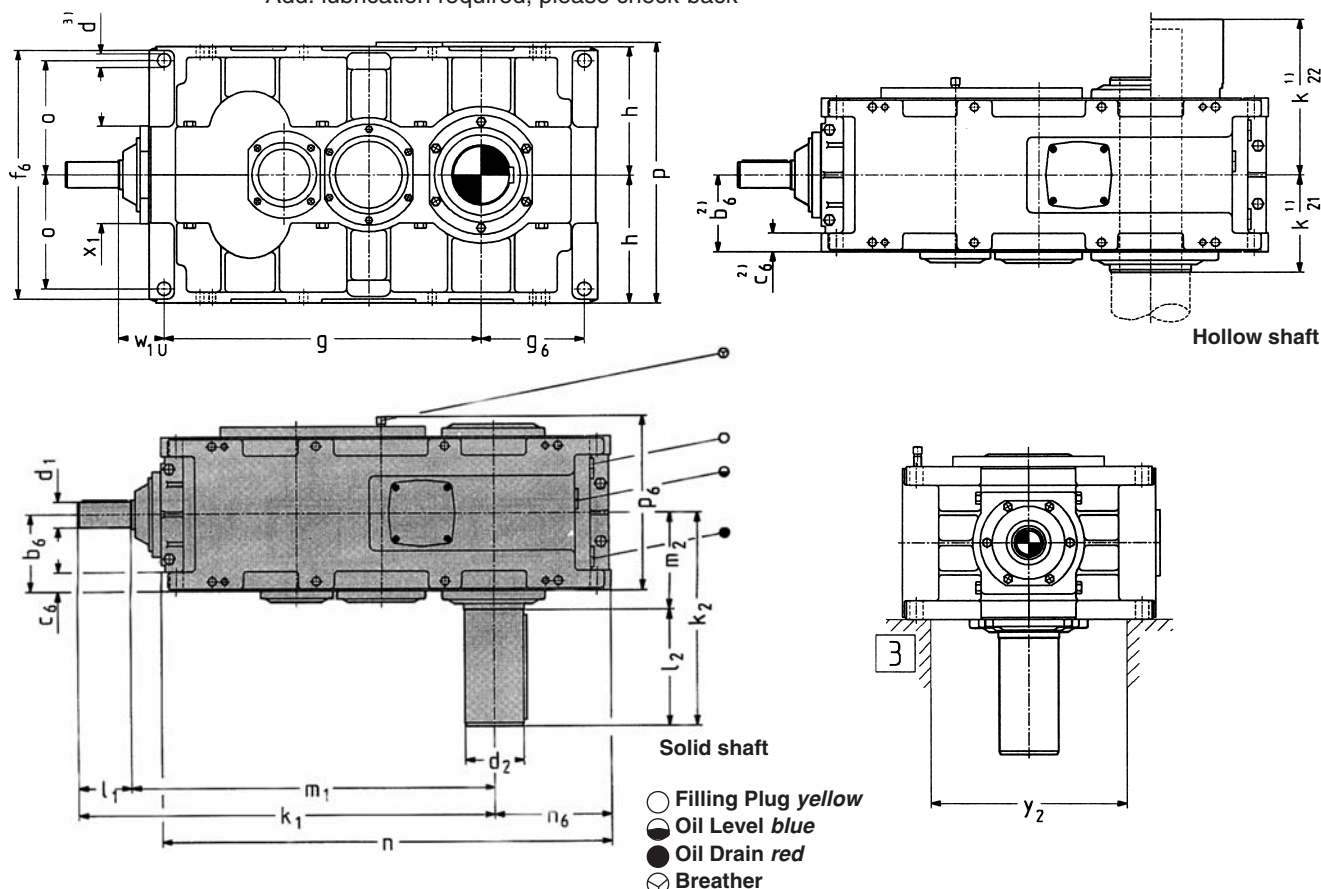
7) Only location of shafts : 1, 3 and 5

8) see dimension sheet 900-0220-MB9

Dimensions

Type PLC 35-U3 ... PLC 67-U3

Add. lubrication required, please check-back



Type	Input shaft					Output shaft					Weight [kg]	Oil filling [l]
	Ø d ₁ m6	k ₁	l ₁	m ₁	Ø x ₁	Ø d ₂ m6	k ₂	l ₂	m ₂	Ø x ₂		
PLC 35	75	1214	160	1054	285	155	570	290	280	328	1530	95
PLC 40	75	1291	160	1131	285	175	570	290	280	348	1860	130
PLC 42	85	1455	180	1275	350	195	650	330	320	400	2230	155
PLC 45	85	1521	180	1341	350	210	730	410	320	440	2780	225
PLC 47	85	1607	180	1427	350	230	730	410	320	440	3330	305
PLC 50	100	1792	215	1577	440	250	795	410	385	480	4300	290
PLC 53	100	1863	215	1648	440	250	795	410	385	480	4900	400
PLC 56	100	1956	215	1741	440	270	845	460	385	540	5600	550
PLC 60												
PLC 63												
PLC 67												

d ₁ , d ₂	75...85	> 100
Tapped centre holes in shaft ends DIN 332 Form DS	M 20	M 24

Keys to DIN 6885/1 supplied by ELECON

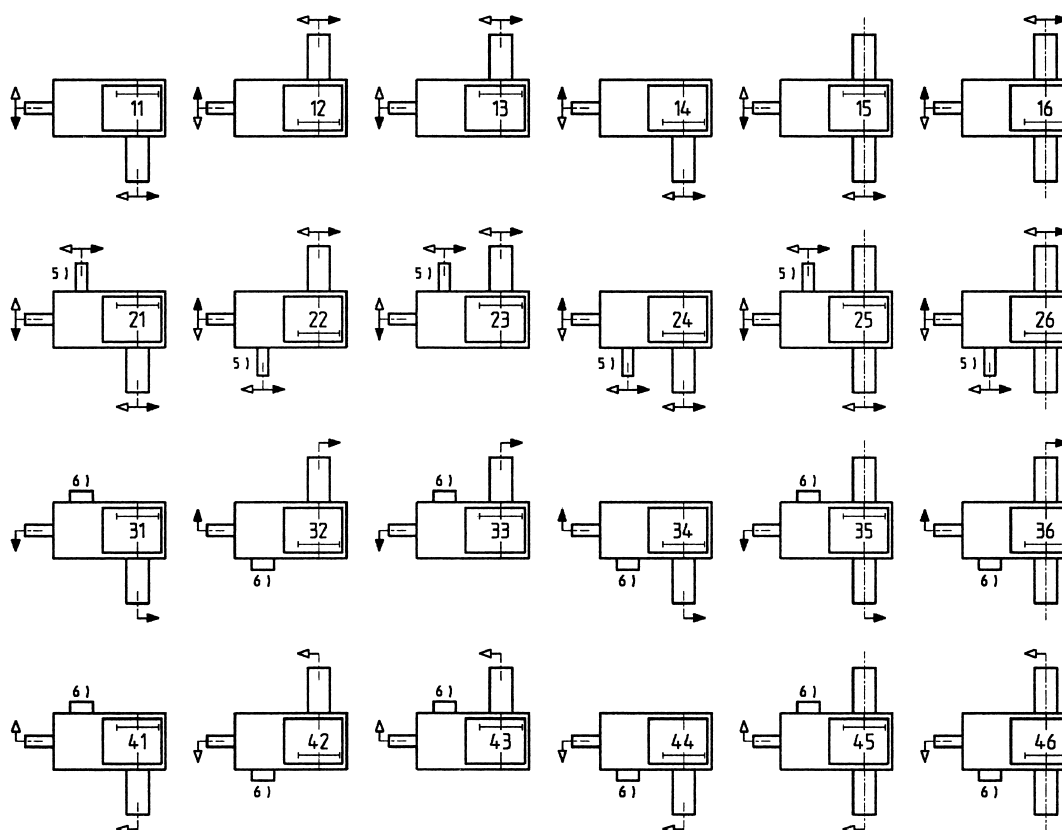
Type of protection as per IP 55

Type	b ₆ -0.2	c ₆	f ₆	g	g ₆	h -0.2	n	n ₆	o	p	p ₂	p ₆	Fitting		W _{1U}
													Ø d _{H9}	ds x l _{max} 3)	
PLC 35	225	55	578	925	305	300	1315	345	255	610	262	510	40	M36x330	129
PLC 40	225	55	728	1002	382	375	1470	423	330	760	262	510	40	M36x330	129
PLC 42	265	62	680	1134	372	355	1615	422	305	720	303	590	45	M42x400	141
PLC 45	265	62	820	1200	440	425	1749	490	375	860	303	590	45	M42x400	141
PLC 47	265	62	970	1285	525	500	1920	575	440	1010	303	590	52	M48x400	142
PLC 50	320	75	820	1392	450	425	1962	505	360	910	358	710	60	M56x400	185
PLC 53	320	75	970	1463	525	500	2108	580	435	1060	358	710	60	M56x400	185
PLC 56	320	75	1170	1556	625	600	2301	680	535	1260	365	715	60	M56x400	185
PLC 60															
PLC 63															
PLC 67															

1. Dimensions of hollow shaft and machine shaft on request
2. Torque arms see dimensions 900-253-MB1
3. Foundation bolts of min. property class10.9
4. Available for shaft d₁ : n ≥ 1000 min⁻¹ lower speed on request

Location of input and output shafts

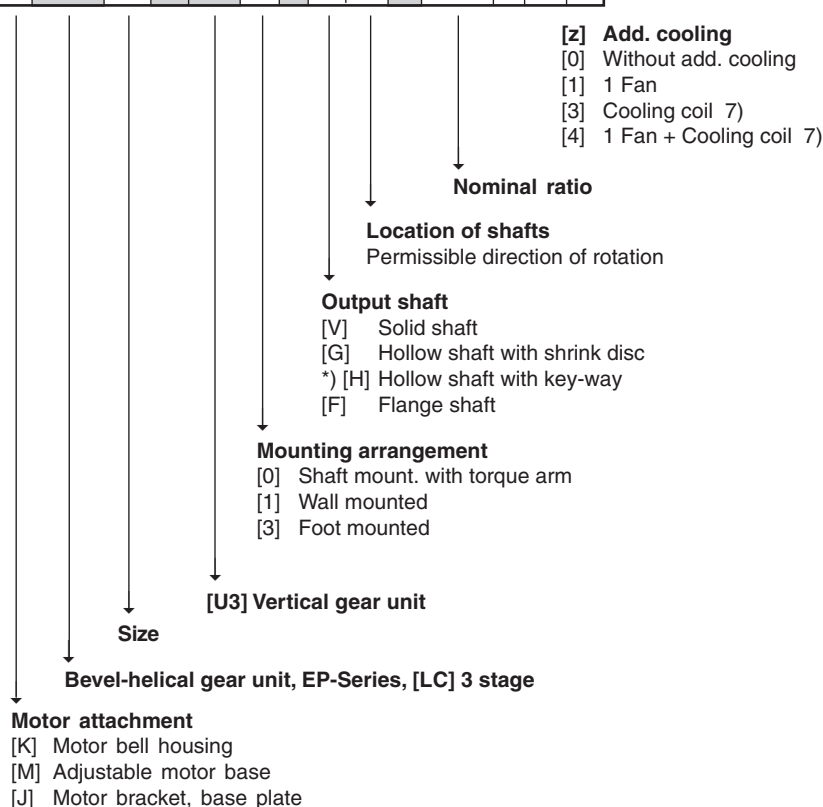
Directions of rotation viewing ↔



- 5) Add. shaft extension
6) Backstop, see 900-1254-MB1

K PLC 35 - U3 3 - V 11 - 25 - Z 3

Example

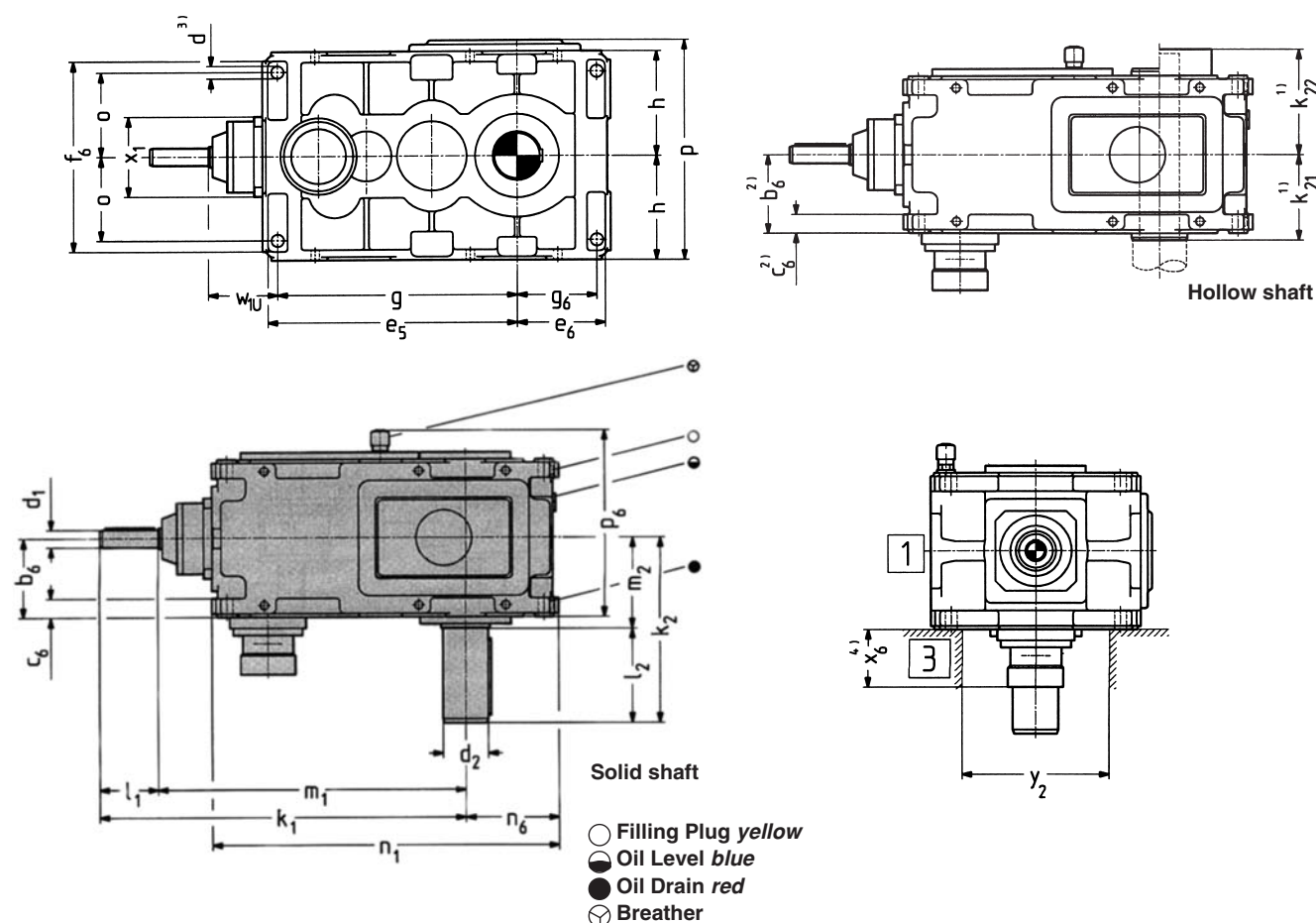


- 7) Only location of shafts : 1, 3 and 5
*) Only types PLC35 and PLC40

Dimensions

Type PLD 14-U3 ... PLD 31-U3

Add. lubrication required, please check-back



Type	Input shaft					Output shaft						Weight [kg]	Oil filling [l]
	Ø d1 k6	k1	l1	m1	Ø x1	Ø d2 m6	k2	l2	m2	Ø x2	y2		
PLD 14	20	552	80	472	148	65	270	135	135	-	210	125	11
PLD 16	20	608	80	528	148	85	290	145	145	-	270	180	16
PLD 18	25	703	85	618	190	95	350	170	180	-	270	255	25
PLD 20	25	757	85	672	190	120	370	190	180	-	340	345	34
PLD 22	40	908	120	788	225	130	405	190	215	-	330	475	49
PLD 25	40	966	120	846	225	145	450	230	220	-	390	610	53
PLD 28	40	1021	120	901	255	160	480	230	250	-	400	780	83
PLD 31	40	1089	120	969	255	175	540	290	250	-	470	1070	95

Tapped centre holes in shaft ends DIN 332 Form DS				
d1, d2				
20	25	40	65...85	> 85
M 6	M 10	M 16	M 20	M 24

Keys to DIN 6885/1 supplied by ELECON

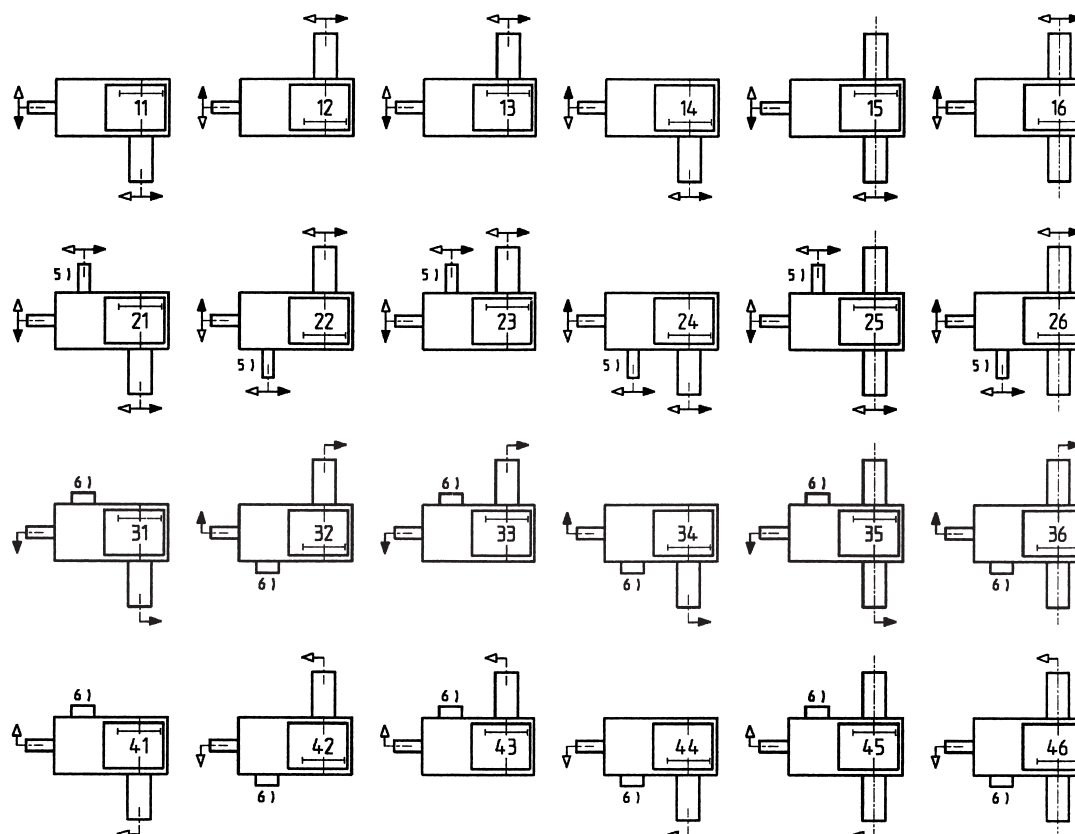
Type of protection as per IP 55

Type	b ₆ -0.2	c ₆	e ₅	e ₆	f ₆	g	g ₆	h -0.2	n ₁	n ₆	o	p	p ₂	P ₆	Fitting		W _{1U}	x ₆
															Ød H ₉	d _s x l _{max} 3)		
PLD 14	113	27	357	126	274	344	113	150	500	134	121	333	-	270	16	M14x65	128	130
PLD 16	113	27	413	175	334	400	162	180	605	183	151	393	-	270	16	M14x65	128	130
PLD 18	147	32	475	162	348	458	145	190	654	171	155	419	-	340	22	M20x80	160	130
PLD 20	147	32	528	218	418	511	201	225	764	227	190	489	-	340	22	M20x80	161	130
PLD 22	179	41	600	200	426	580	180	235	826	215	190	513	-	416	26	M24x100	208	130
PLD 25	179	41	658	256	486	638	236	265	940	271	220	573	204	416	26	M24x100	208	130
PLD 28	210	48	731	245	508	706	221	280	1000	256	227	610	246	480	33	M30x120	195	130
PLD 31	210	48	798	307	578	773	282	315	1137	325	262	680	239	480	33	M30x120	195	130

1. Dimensions of hollow shaft and machine shaft on request
2. Torque arms see dimensions 900-0253-MB1
3. Holding down bolts of min. property class10.9
4. Available for shaft d1 : n ≥ 1000 min⁻¹ lower speed on request

Location of input and output shafts

Directions of rotation viewing ↻

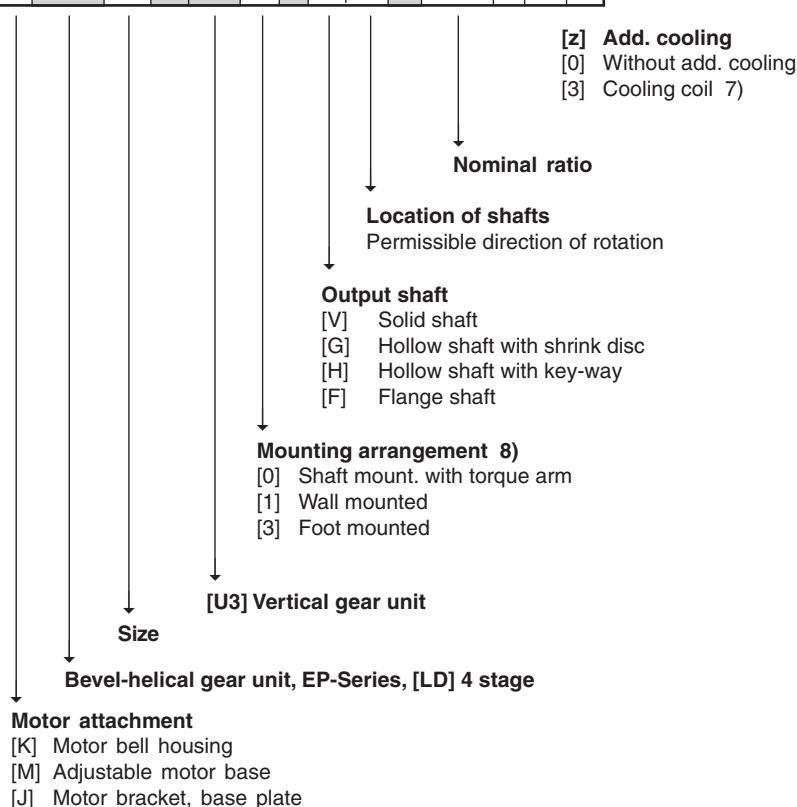


5) Add. shaft extension (900-1200-...)

6) Backstop, see 900-1254-MB1

K PLD 22 - U3 3 - V 11 - 250 - Z 3

Example



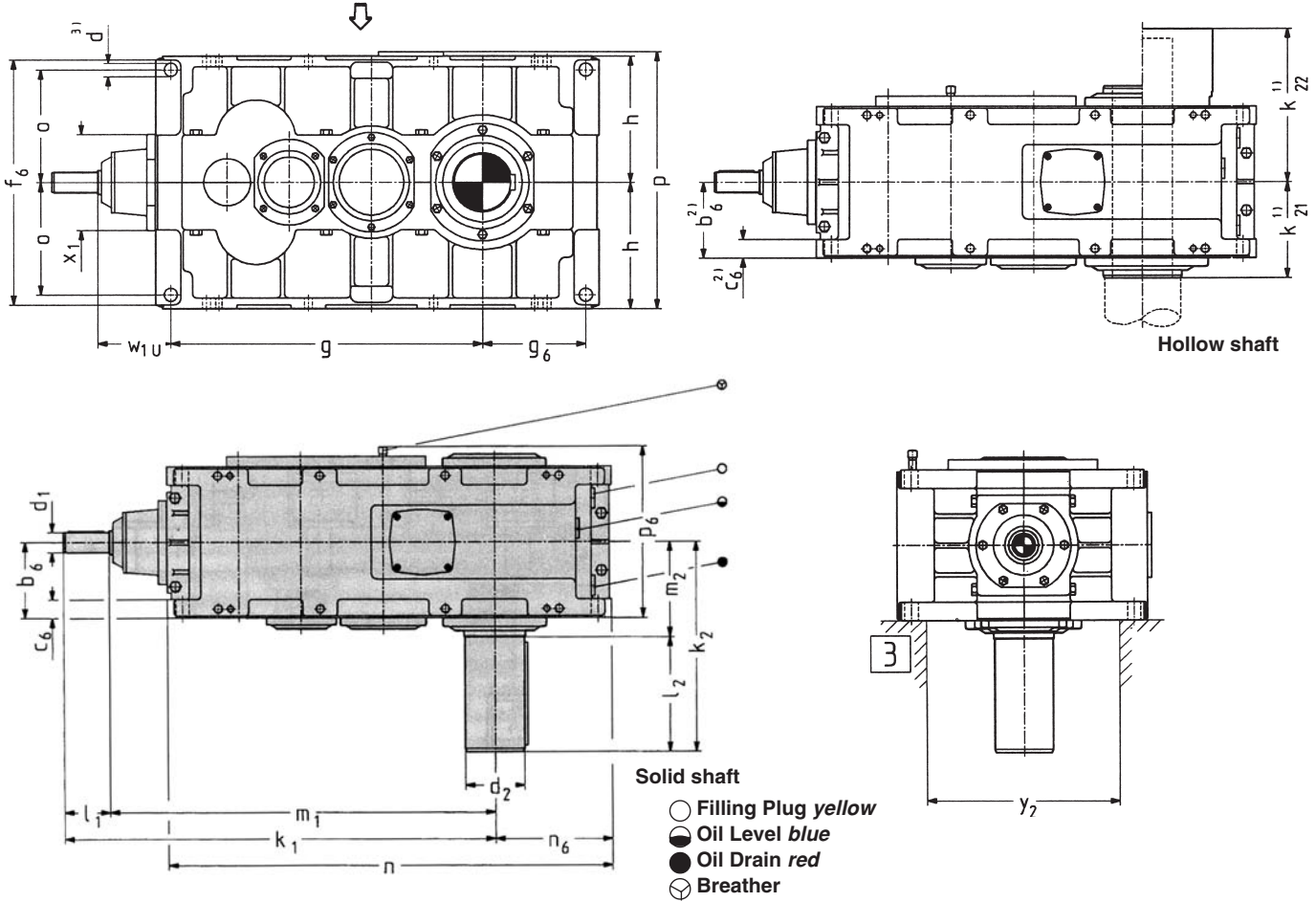
7) Only location of shafts : 1, 3 and 5

8) see dimension sheet 900-0220-MB9

Dimensions

Type PLD 35-U3 ... PLD 67-U3

Add. lubrication required, please check-back



Type	Input shaft					Output shaft						Weight [kg]	Oil filling [l]
	Ø d ₁ m6	k ₁	l ₁	m ₁	Ø x ₁	Ø d ₂ m6	k ₂	l ₂	m ₂	Ø x ₂	y ₂		
PLD 35	50 k6	1188	120	1068	285	155	570	290	280	328	440	1530	100
PLD 40	50 k6	1265	120	1145	285	175	570	290	280	348	590	1860	135
PLD 42	60	1416	145	1271	350	195	650	330	320	400	530	2230	170
PLD 45	60	1482	145	1337	350	210	730	410	320	440	670	2780	240
PLD 47	60	1568	145	1423	350	230	730	410	320	440	780	3330	325
PLD 50	75	1748	160	1588	440	250	795	410	385	480	590	4300	290
PLD 53	75	1819	160	1659	440	250	795	410	385	480	740	4900	400
PLD 56	75	1912	160	1752	440	270	845	460	385	540	940	5600	550
PLD 60													
PLD 63													
PLD 67													

d ₁ , d ₂	50	60...85	≥ 155
Tapped centre holes in shaft ends DIN 332 Form DS	M 16	M 20	M 24

Keys to DIN 6885/1 supplied by ELECON

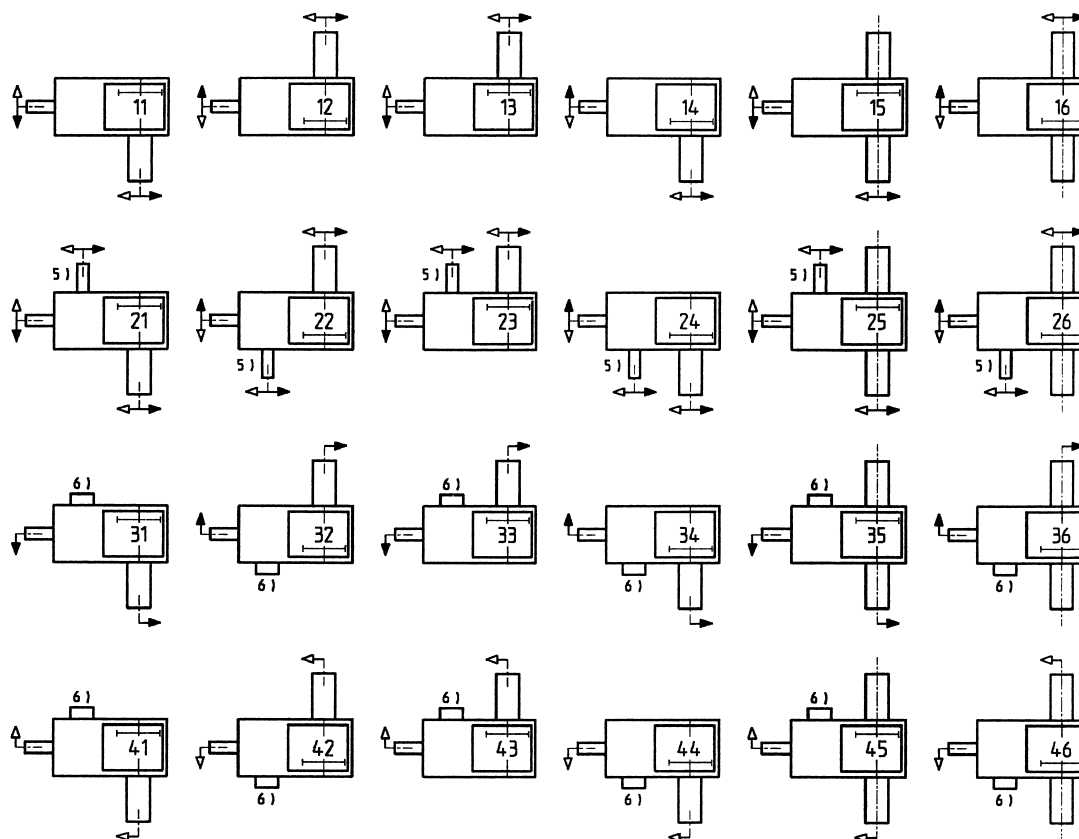
Type of protection as per IP 55

Type	b ₆ -0.2	c ₆	f ₆	g	g ₆	h -0.2	n	n ₆	o	p	p ₂	p ₆	Ø d _{H9}	Fitting ds x lmax 3)	W _{1U}
PLD 35	225	55	578	925	305	300	1315	345	255	610	262	510	40	M36x330	143
PLD 40	225	55	728	1002	382	375	1470	423	330	760	262	510	40	M36x330	143
PLD 42	265	62	680	1134	372	355	1615	422	305	720	303	590	45	M42x400	137
PLD 45	265	62	820	1200	440	425	1749	490	375	860	303	590	45	M42x400	137
PLD 47	265	62	970	1285	525	500	1920	575	440	1010	303	590	52	M42x400	138
PLD 50	320	75	820	1392	450	425	1962	505	360	910	358	710	60	M56x400	196
PLD 53	320	75	970	1463	525	500	2108	580	435	1060	358	710	60	M56x400	196
PLD 56	320	75	1170	1556	625	600	2301	680	535	1260	365	715	60	M56x400	196
PLD 60															
PLD 63															
PLD 67															

1. Dimensions of hollow shaft and machine shaft on request
2. Torque arms see dimensions 900-253-MB1

Location of input and output shafts

Directions of rotation viewing ↷

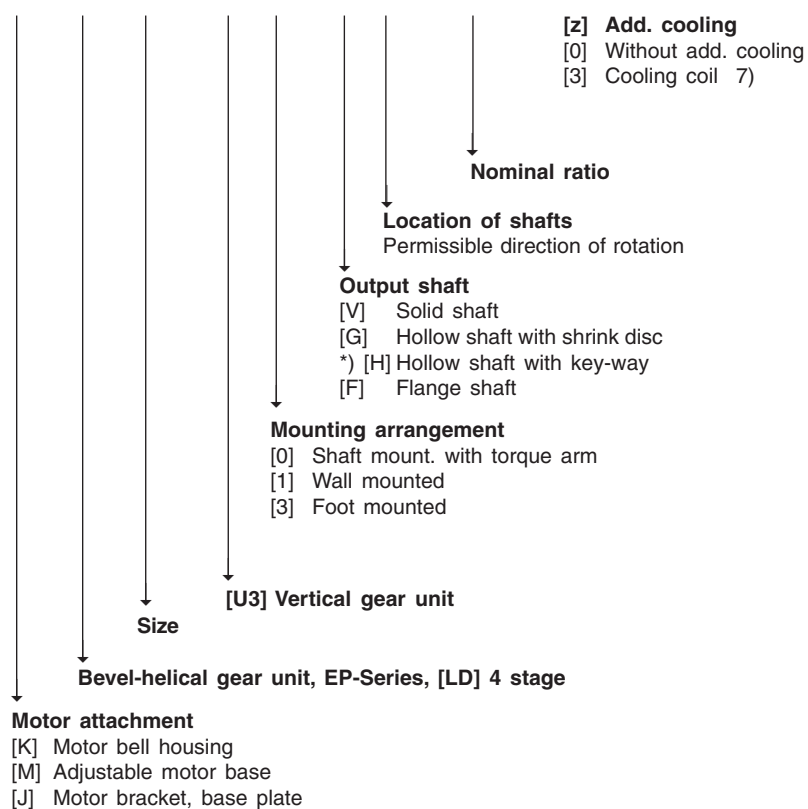


5) Add. shaft extension

6) Backstop, see 900-1254-MB1

K PLD 35 - U3 3 - V 11 - 250 - Z 3

Example



7) Only location of Shaft : .1, .3 and .5

*) Only types PLD35 and PLD40

Power ratings

Type				Gearbox Size																		
PWC				14	16	18	20	22	25	28	31	35	40	42	45	47	50	53	56	60	63	67
Compact Drives, three-stage	i _N	n ₁ [min ⁻¹]	n ₂	Nominal Power P _N [kW]																		
	25	1500 1000	60 40	20 13		56 37		106 71		213 142		372 248		660 440			1220 812			2160 1440		
	28	1500 1000	54 35.5	18 12		47 31		94 63		190 127		339 226		589 393			1090 725			1930 1285	2330 1560	
	31.5	1500 1000	47.5 31.5	15.4 10		41 27		82 54	123 82	160 107		283 188	394 263	519 346	653 435		966 644	1190 795		1710 1140	2075 1385	2410 1610
	35.5	1500 1000	42.5 28	14 9.3		39 26	52 35	74 49	103 69	150 100	208 139	262 175	350 233	465 310	591 394		858 572	1060 705	1315 875	1520 1015	1770 1180	2140 1425
	40	1500 1000	37.5 25	13 8.7	21 14	33 22	46 31	66 44	89 60	133 89	185 123	237 158	298 199	413 275	505 337	633 422	761 507	921 614	1170 777	1350 900	1635 1090	1810 1200
	45	1500 1000	33.5 22.2	11 7.2	19 13	29 19	41 27	58 38	86 57	112 75	152 101	200 133	276 184	363 242	457 305	574 383	677 451	835 557	1000 665	1200 800	1450 968	1690 1125
	50	1500 1000	30 20	10 6.7	16 11	28 19	37 25	53 35	73 49	106 71	148 99	186 124	248 165	330 220	420 280	502 335	609 406	751 501	932 621	1080 719	1260 838	1520 1010
	56	1500 1000	27 17.9	9.1 6.1	15 10	23 15	33 22	47 31	64 43	95 63	132 88	169 113	215 142	295 197	361 241	452 301	544 363	658 439	833 555	963 642	1170 778	1290 860
	63	1500 1000	23.8 16	7.7 5.2	13 8.7	20 14	29 20	41 28	61 41	80 53	109 73	142 95	197 131	259 173	327 218	410 273	483 322	596 397	712 475	856 571	1040 691	1205 803
	71	1500 1000	21 14	7.0 4.7	11 7.5	18 12	26 17	37 25	51 34	71 47	104 69	126 84	175 117	222 148	295 197	353 235	429 286	529 353	657 438	754 503	885 590	1070 713
	80	1500 1000	18.8 12.5		11 7.3		23 15		45 29		92 61		150 99		252 168	317 211		461 307	583 389		788 524	903 602
	90	1500 1000	16.7 11.1		9.4 6.3		21 14		40 27		76 51		133 89		220 146	287 191		405 270	498 332			804 535
	100	1500 1000	15 10		8.0 5.3		19 12				67 45					251 167			444 296			
	112	1500 1000	13.4 8.9		7.2 4.8											218 144						

Type				Gearbox Size																		
PWD				14	16	18	20	22	25	28	31	35	40	42	45	47	50	53	56	60	63	67
Compact Drives, four-stage	i _N	n ₁ n ₂ [min ⁻¹]		Nominal Power P _N [kW]																		
	71	1500 1000	21 14	7.2 4.8																		
	80	1500 1000	18.8 12.5	6.4 4.3		17 11		33 22		67 45		116 77		206 137			381 254			674 450		
	90	1500 1000	16.7 11.1	5.4 3.6		15 10		29 19		59 39		105 70		183 122			338 225			600 400	726 484	
	100	1500 1000	15 10	5.1 3.4		12.9 8.6		26 17.3	39 26	50 33		90 60	124 83	163 109	206 137		304 203	376 251		539 360	653 435	760 506
	112	1500 1000	13.4 8.9	4.6 3.1	7.6 5.1	12 8.0	17 11	24 16	33 22	48 32	66 44	83 55	111 74	147 98	187 125		272 181	335 223	416 277	482 321	561 374	677 451
	125	1500 1000	12 8	3.9 2.5	6.8 4.5	11 7.3	15 10	21 14	29 19	43 29	59 39	76 51	96 64	132 88	162 108	203 135	244 163	295 197	373 249	432 288	523 349	578 385
	140	1500 1000	10.7 7.1	3.7 2.5	5.7 3.8	9.5 6.1	13.2 8.8	18.5 12.3	28 19	36 24	49 33	64 42	89 59	117 78	147 98	184 123	217 145	267 179	320 213	385 257	467 311	542 361
	160	1500 1000	9.4 6.3	3.2 2.1	5.3 3.5	8.7 5.8	12 8.0	17 11	23 15	33 22	46 31	58 39	78 52	103 69	131 87	157 105	190 127	235 157	291 194	337 225	393 262	474 316
	180	1500 1000	8.33 5.55	2.7 1.8	4.7 3.1	7.3 4.9	10 6.7	15 10	19 13	30 20	41 27	53 35	66 44	92 61	112 75	141 94	169 113	205 137	259 173	300 200	363 242	401 267
	200	1500 1000	7.5 5	2.6 1.7	4.0 2.7	6.4 4.3	9.3 6.2	13 8.6	20 13	25 17	34 23	45 30	62 41	82 55	103 69	129 86	152 101	188 125	224 149	270 180	327 218	380 253
	224	1500 1000	6.7 4.46	2.3 1.5	3.8 2.5	6.2 4.1	8.3 5.5	12 8.0	16 11	24 16	33 22	42 28	55 37	74 49	94 63	112 75	136 91	167 112	208 139	241 161	281 187	340 226
	250	1500 1000	6 4	1.9 1.3	3.4 2.3	5.3 3.5	7.4 4.9	11 7.3	14 9.5	21 14	30 20	38 25	48 32	66 44	81 54	101 67	122 81	147 98	186 124	216 144	261 174	290 193
	280	1500 1000	5.36 3.57	1.8 1.2	2.9 1.9	4.6 3.0	6.6 4.4	9.2 6.1	14 9.3	18 12	25 17	32 21	44 29	58 39	74 49	92 61	109 73	134 89	160 107	193 129	233 155	271 181
	315	1500 1000	4.76 3.17		2.7 1.8	4.1 2.7	5.9 3.9	8.2 5.5	12 8.0	16 11	23 15	28 19	39 26	50 33	67 45	80 53	97 65	119 79	148 99	171 114	200 133	241 161
	355	1500 1000	4.22 2.82		2.4 1.6		5.2 3.5		10 6.7		21 14		34 22		57 38	71 47		104 69	131 87		177 118	204 136
	400	1500 1000	3.75 2.5		2.0 1.3		4.6 3.1		9.0 6.0		17 11		30 20		50 33	65 43		91 61	112 75			181 120
	450	1500 1000	3.35 2.22		1.8 1.2		4.1 2.7				15 10					56 37			99 66			
	500	1500 1000	3 2													49 32						

Thermal capacities

Type PWC.. -R1																				
Add. lubrication required																				
Average air speed	n ₁ (min ⁻¹)	Gearbox Size																		
		14	16	18	20	22	25	28	31	35	40	42	45	47	50	53	56	60	63	67
		P _{to} [kW] / without add. cooling																		
Vw = 0.5 m/s 1)	-	15	20	25	32	39	47	55	66	95	109	123	148	180	180	212	259	268	306	346
Vw = 1.2 m/s 2)	-	21	28	35	44	54	65	77	92	132	151	171	206	250	250	295	360	372	425	480
Vw = 4.0 m/s 3)	-	27	35	45	56	69	83	99	118	169	193	219	264	320	320	378	461	476	544	614
		P _{t1} [kW] / with fan																		
-	1500	41	54	68	86	105	126	149	179	257	294	333	401	485	485	574	700	On request		
-	1000	30	40	51	64	78	94	111	133	191	218	247	298	360	360	425	520			
		P _{t3} [kW] / with cooling coil																		
Vw = 0.5 m/s 1)	-	43	82	57	116	123	207	174	288	278	500	415	539	571	669	845	892	901	939	979
Vw = 1.2 m/s 2)	-	49	89	67	128	138	225	195	314	315	542	463	597	641	739	928	993	1005	1058	1113
Vw = 4.0 m/s 3)	-	55	97	76	141	153	243	216	340	352	584	511	655	711	809	1011	1094	1109	1177	1247
		P _{t4} [kW] / with fan and cooling coil																		
-	1500	69	116	100	170	189	286	267	401	440	686	626	793	877	974	1207	1333	On request		
-	1000	58	102	83	148	162	254	229	355	374	610	540	690	752	849	1058	1153			
Vw = 0.5 m/s		P _{t0} and P _{t3} - Meant for Gearbox size 35-67. are applicable from ratios, indicated. (For smaller ratio; consult ELECON)								22.4	22.4	28	28	28	31.5	31.5	31.5	35.5	35.5	35.5
Vw = 1.2 m/s										18	22.4	18	22.4	28	22.4	22.4	25	25	25	28

Type PWD.. -R1																				
Add. lubrication required																				
Average air speed	n ₁ (min ⁻¹)	Gearbox Size																		
		14	16	18	20	22	25	28	31	35	40	42	45	47	50	53	56	60	63	67
		P _{to} [kW] / without add. cooling																		
Vw = 0.5 m/s 1)	-	12	16	20	26	31	37	44	53	67	76	86	104	126	126	165	202	209	238	269
Vw = 1.2 m/s 2)	-	17	22	28	36	43	52	61	74	93	106	120	144	175	175	229	280	290	331	374
Vw = 4.0 m/s 3)	-	22	28	36	45	55	66	79	94	119	136	154	184	224	224	293	358	371	424	479
		P _{t3} [kW] / with cooling coil																		
Vw = 0.5 m/s 1)	-	34	65	45	93	80	166	139	231	195	350	291	378	400	506	657	694	701	730	761
Vw = 1.2 m/s 2)	-	39	71	53	103	92	180	156	251	221	380	325	418	449	555	721	772	782	823	866
Vw = 4.0 m/s 3)	-	44	78	61	113	104	194	173	272	247	410	359	458	498	604	785	850	863	916	971

- 1) Small closed room, little air movement
- 2) Large hall with free air movement
- 3) Constantly strong air movement

Table 4 : f _w : Thermal Factor					
ϑ _u [°C]	ED %				
	100	80	60	40	20
10	1.14	1.21	1.34	1.53	2.03
20	1.00	1.06	1.17	1.34	1.78
30	0.86	0.91	1.00	1.15	1.53
40	0.71	0.76	0.84	0.96	1.27
50	0.57	0.61	0.67	0.77	1.02

Thermal capacities of types PWC/PWD-S5 and - T6, -U3, -U4 on request

Table 5 : f _a : Utilization Factor								
Utilization P _e /P _N [%]								
20	30	40	50	60	70	80	90	100
0.7	0.8	0.86	0.9	0.93	0.96	0.98	0.99	1

For values less than 20% consult ELECON

Nominal Output Torques

Compact Drives, 3-stage

Type	Gearbox Size																					
PWC	14	16	18	20	22	25	28	31	35	40	42	45	47	50	53	56	60	63	67			
i _N	Nominal Output Torques T _{2N} [kNm]																					
25	3.26		8.86		16.8		33.9		59.3		105			194				343	416			
28									60.4		131											
31.5	3.1		8.2		16.5	24.6	32.0	57.0	79.0	104	131		239							297	400	483
35.5	3.26		8.86	11.8	16.8	23.3	33.9	47.0	59.3	79.0	105	134				235	297		343	416		
40			8.36			22.8			60.4		76.0	129									161	460
45	3.1	5.41	8.2		16.5	24.6	32.0	43.7	57.0	79.0	104	131	164			235	286			483		
50	3.26	5.1	8.86		16.8	23.3	33.9	47.0	59.3	79.0	105	134	160			239	297			343	400	
56			8.36			22.8			60.4			76.0	129									161
63	3.1	5.41	8.2		16.5	24.6	32.0	43.7	57.0	79.0	104	131	164			235	286				343	416
71	3.16	5.1				23.3					32.0	43.7	57.0				79.0					
80		5.41			11.8		22.8		43.7		76.0		129			161						235
90														43.7		126		164				232
100		5.1												160		283						
112																						

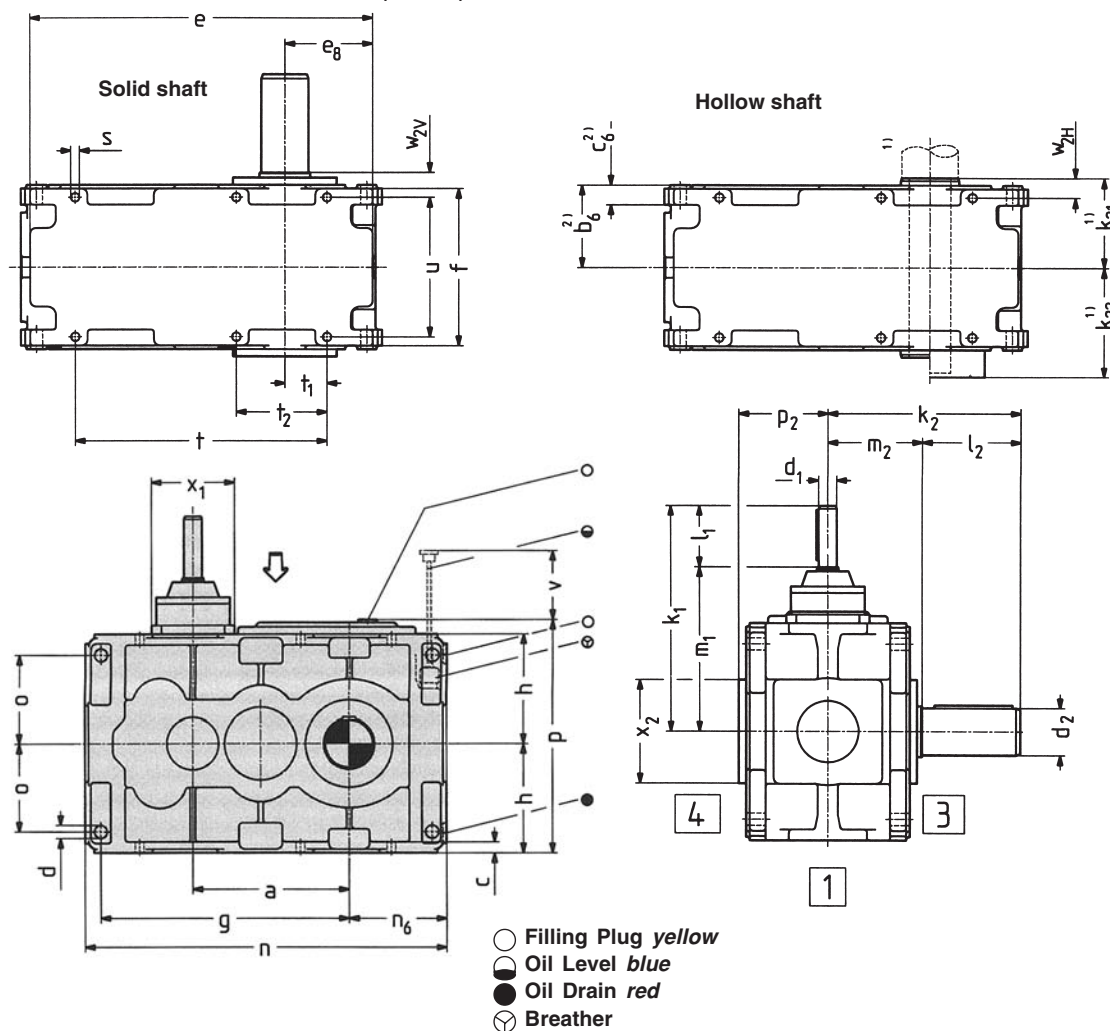
Compect Drives, 4-stage

Type	Gearbox Size																				
PWD	14	16	18	20	22	25	28	31	35	40	42	45	47	50	53	56	60	63	67		
i _N	Nominal Output Torques T _{2N} [kNm]																				
71	3.26													194							
80			8.86						59.3												
90	3.1		8.36		16.8		33.9		60.4		105								416		
100	3.26		8.2	11.8	16.5	24.6	32.0		57.0	79.0	104	131			343	239	297	400	483		
112			8.86		23.3	33.9	47.0	59.3	105		134										
125	3.1	5.41	8.36		16.8	22.8	33.9	47.0	60.4	76.0	105	129	161			235	297		416	460	
140	3.26	5.1	8.2		16.5	24.6	32.0	43.7	57.0	79.0	104	131	164			239	286		400	483	
160			8.86		23.3	33.9	47.0	59.3	105		134	160									
180	3.1	5.41	8.36		16.8	22.8	33.9	47.0	60.4	76.0	105	129	161			235	297		416	460	
200	3.26	5.1	8.2		16.5	24.6	32.0	43.7	57.0	79.0	104	131	164			239	286		400	483	
224			8.86		23.3	33.9	47.0	59.3	105		134	160									
250	3.1	5.41	8.36		16.8	22.8	33.9	47.0	60.4	76.0	105	129	161			235	297		416	460	
280	3.16	5.1	8.2		16.5	24.6	32.0	43.7	57.0	79.0	104	131	164			239	286		400	483	
315		5.41				23.3		47.0				101	134				160				
355								47.0				129	161				297				460
400		5.1					22.8		43.7	76.0		126	164				232		286		
450									42.8				160				283				
500												155									

Dimensions

Type PWC 14-R1 ... PWC 31-R1

Add. lubrication required, please check-back



Type	Input shaft					Output shaft					Weight [kg]	Oil filling [l]
	Ø d ₁ k ₆	k ₁	l ₁	m ₁	Ø x ₁	Ø d ₂ m ₆	k ₂	l ₂	m ₂	Ø x ₂		
PWC 14	25	312	85	227	148	65	270	135	135	-	115	6
PWC 16	25	312	85	227	148	85	290	145	145	-	170	9
PWC 18	40	406	120	286	190	95	350	170	180	-	245	14
PWC 20	40	406	120	286	190	120	370	190	180	-	335	19
PWC 22	50	447	120	327	225	130	405	190	215	-	460	27
PWC 25	50	447	120	327	225	145	450	230	220	296	595	34
PWC 28	60m6	522	145	377	255	160	480	230	250	328	775	46
PWC 31	60m6	522	145	377	255	175	540	290	250	348	1065	62

Tapped centre holes in shaft ends DIN 332 Form DS			
25	40...50	60...85	> 85
M 10	M 16	M 20	M 24

Keys to DIN 6885/1 supplied by ELECON

Type of protection as per IP 55

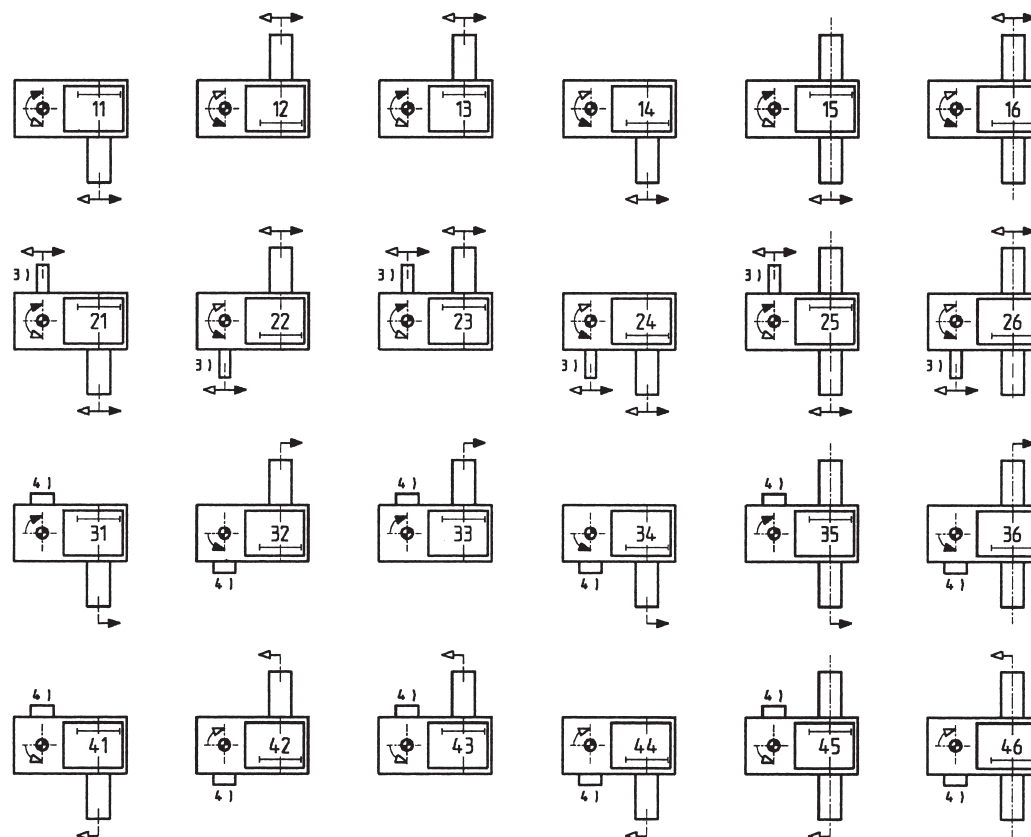
Type	a	b ₆	c	c ₆	Ø d _{H9}	e	e ₈	f	g	h -0.2	n	n ₆	o	p	p ₂	Fitting		t	t ₁	t ₂	u	v	w _{2v}	w _{2H}
																Ø s	d _s x l _{max}							
PWC 14	216	113	15	27	16	474	121	216	344	150	500	134	121	333	-	12	M10x45	348	58	125	192	30	39	27
PWC 16	272	113	15	27	16	579	170	216	400	180	605	183	151	393	-	12	M10x80	453	107	217	192	75	49	27
PWC 18	293	147	18	32	22	622	155	284	458	190	654	171	155	419	-	14.5	M12x55	486	87	175	248	45	56	33
PWC 20	347	147	18	32	22	732	211	284	511	225	764	227	190	489	-	14.5	M12x90	596	143	285	248	70	56	33
PWC 22	376	179	24	41	26	782	193	346	580	235	826	215	190	513	-	18.5	M16x65	622	113	226	306	60	62	36
PWC 25	434	179	24	41	26	896	249	346	638	265	940	271	220	573	204	18.5	M16x90	736	169	340	306	100	67	62
PWC 28	464	210	28	48	33	948	230	408	706	280	1000	256	227	610	246	24	M20x80	752	132	265	360	80	70	70
PWC 31	532	210	28	48	33	1085	299	408	773	315	1137	325	262	680	239	24	M20x110	889	201	402	360	90	70	70

1) Hollow shaft and machine shaft see dimensions 900-0212-MB 1 and 900-0213-MB1

2) Torque arms see dimensions 900-0253-MB1

Location of input and output shafts

Directions of rotation viewing ↗

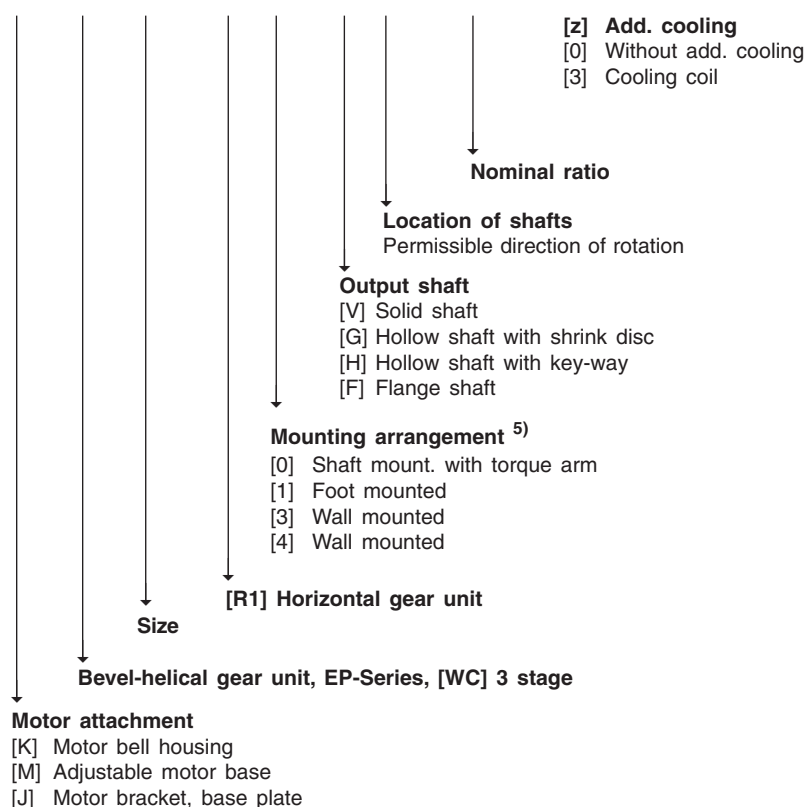


3) Add. shaft extension (900-1200-...)

4) Backstop, see 900-1254-MB1

K	PWC	22	-	R1	1	-	V	11	-	25	-	Z	3
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Example

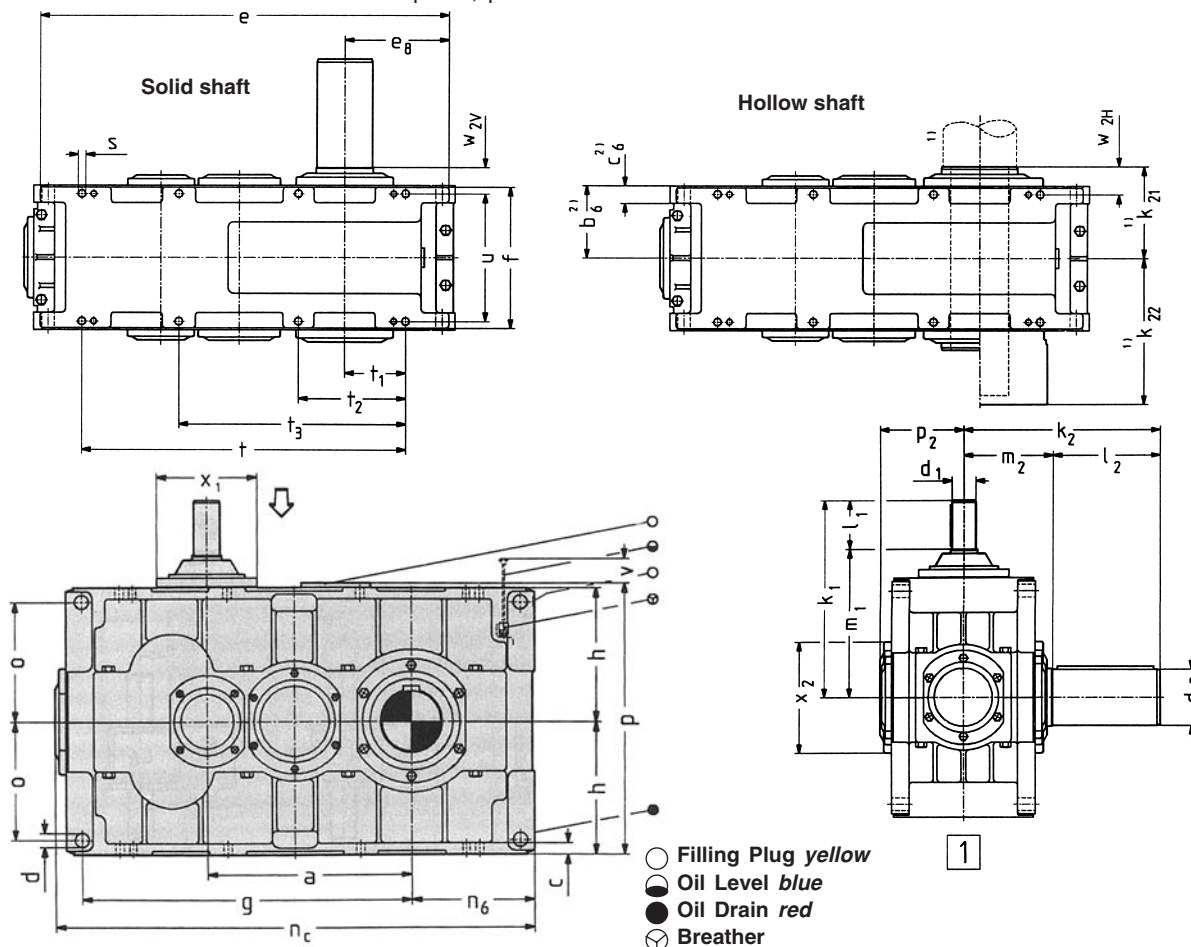


5) see dimension sheet 900-0220-MB9

Dimensions

Type PWC 35-R1 ... PWC 67-R1

Add. lubrication required, please check-back



Type	Input shaft					Output shaft					Weight [kg]	Oil filling [l]
	Ø d ₁ m6	k ₁	l ₁	m ₁	Ø x ₁	Ø d ₂ m6	k ₂	l ₂	m ₂	Ø x ₂		
PWC 35	75	644	160	484	285	155	570	290	280	328	1500	55
PWC 40	75	644	160	484	285	175	570	290	280	348	1830	75
PWC 42	85	762	180	582	350	195	650	330	320	400	2200	90
PWC 45	85	762	180	582	350	210	730	410	320	440	2750	130
PWC 47	85	762	180	582	350	230	730	410	320	440	3300	175
PWC 50	100	935	215	720	440	250	795	410	385	480	4350	180
PWC 53	100	935	215	720	440	250	795	410	385	480	4950	250
PWC 56	100	935	215	720	440	270	845	460	385	540	5450	350
PWC 60	130	1081	250	831	540	290	920	460	460	540	7400	360
PWC 63	130	1081	250	831	540	310	970	510	460	580	8400	460
PWC 67	130	1081	250	831	540	310	970	510	460	580	9450	570

d ₁ , d ₂	75...85	≥ 100
Tapped centre holes in shaft ends DIN 332 Form DS	M 20	M 24

Keys to DIN 6885/1 supplied by ELECON

Type of protection as per IP 55

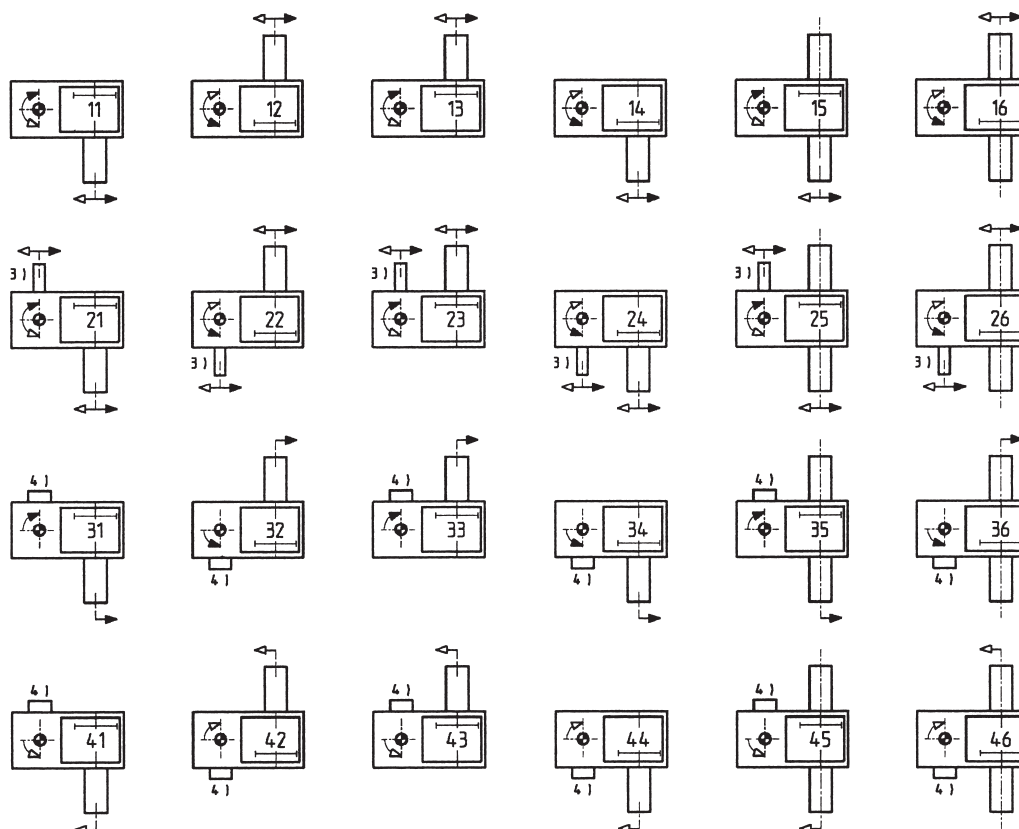
Type	a	b ₆	c	c ₆	Ø d _{H9}	e	e ₈	f	g	h -0.2	n _c	n ₆	o	p	p ₂	Fitting		t	t ₁	t ₂	t ₃	u	v	w _{2v}	w _{2H}
																Ø s	d _s x l _{max}								
PWC 35	570	225	32	55	40	1275	325	438	925	300	1346	345	255	610	262	24	M20x85	1005	190	325	695	396	190	82	87
PWC 40	647	225	32	55	40	1430	403	438	1002	375	1501	423	330	760	262	24	M20x120	1157	265	477	847	396	220	82	87
PWC 42	693	265	40	62	45	1555	392	514	1134	355	1652	422	305	720	303	28	M24x100	1230	225	390	820	460	250	90	85
PWC 45	759	265	40	62	45	1689	460	514	1200	425	1786	490	375	860	303	28	M24x120	1356	285	516	946	460	250	90	90
PWC 47	845	265	40	62	52	1860	545	514	1285	500	1957	575	440	1010	303	28	M24x250	1527	370	687	1117	460	250	90	100
PWC 50	857	320	50	75	60	1892	470	620	1392	425	1962	505	360	860	358	35	M30x120	1524	280	504	1014	560	250	105	110
PWC 53	928	320	50	75	60	2038	545	620	1463	500	2108	580	435	1010	358	35	M30x180	1670	355	650	1160	560	250	105	110
PWC 56	1021	320	50	75	60	2231	645	620	1556	600	2301	680	535	1210	365	35	M30x250	1858	450	838	1348	560	250	105	110
PWC 60	1032	395	60	90	65	2272	565	770	1669	530	2342	600	460	1070	440	42	M36x150	1840	345	630	1200	690	350	115	120
PWC 63	1105	395	60	90	65	2420	640	770	1742	600	2490	675	530	1210	440	42	M36x200	1988	420	778	1348	690	350	115	120
PWC 67	1176	395	60	90	70	2566	715	770	1806	670	2636	750	590	1350	440	42	M36x250	2134	495	924	1494	690	350	115	120

1) Hollow shaft and machine shaft see dimensions 900-0212-MB 1 and 900-0213-MB1

2) Torque arms see dimensions 900-0253-MB1

Location of input and output shafts

Directions of rotation viewing ↗

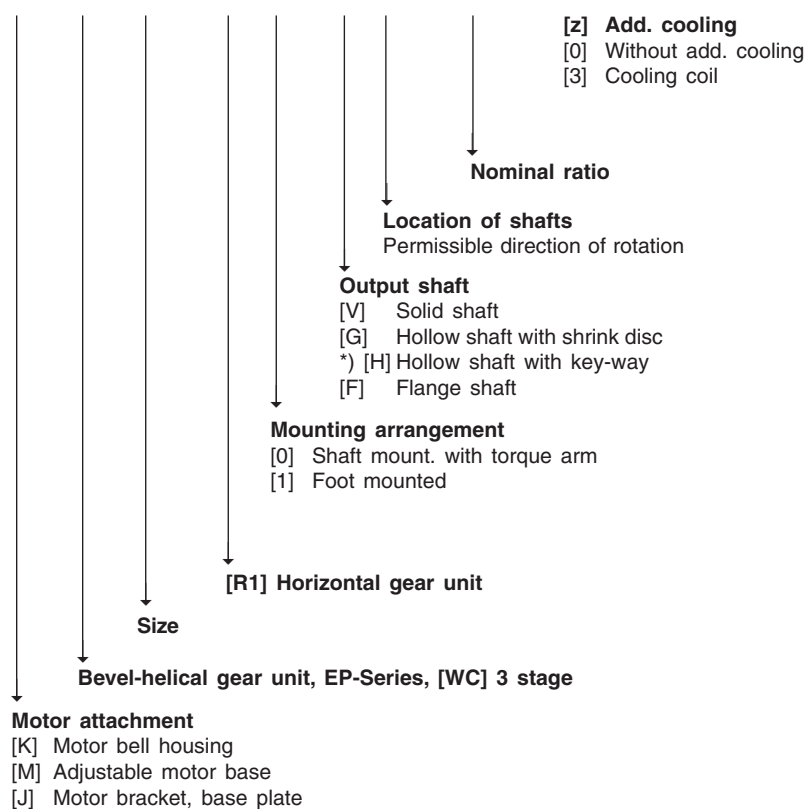


3) Add. shaft extension

4) Backstop, see 900-1254-MB1

K PWC 35 - R1 1 - V 11 - 25 - Z 3

Example

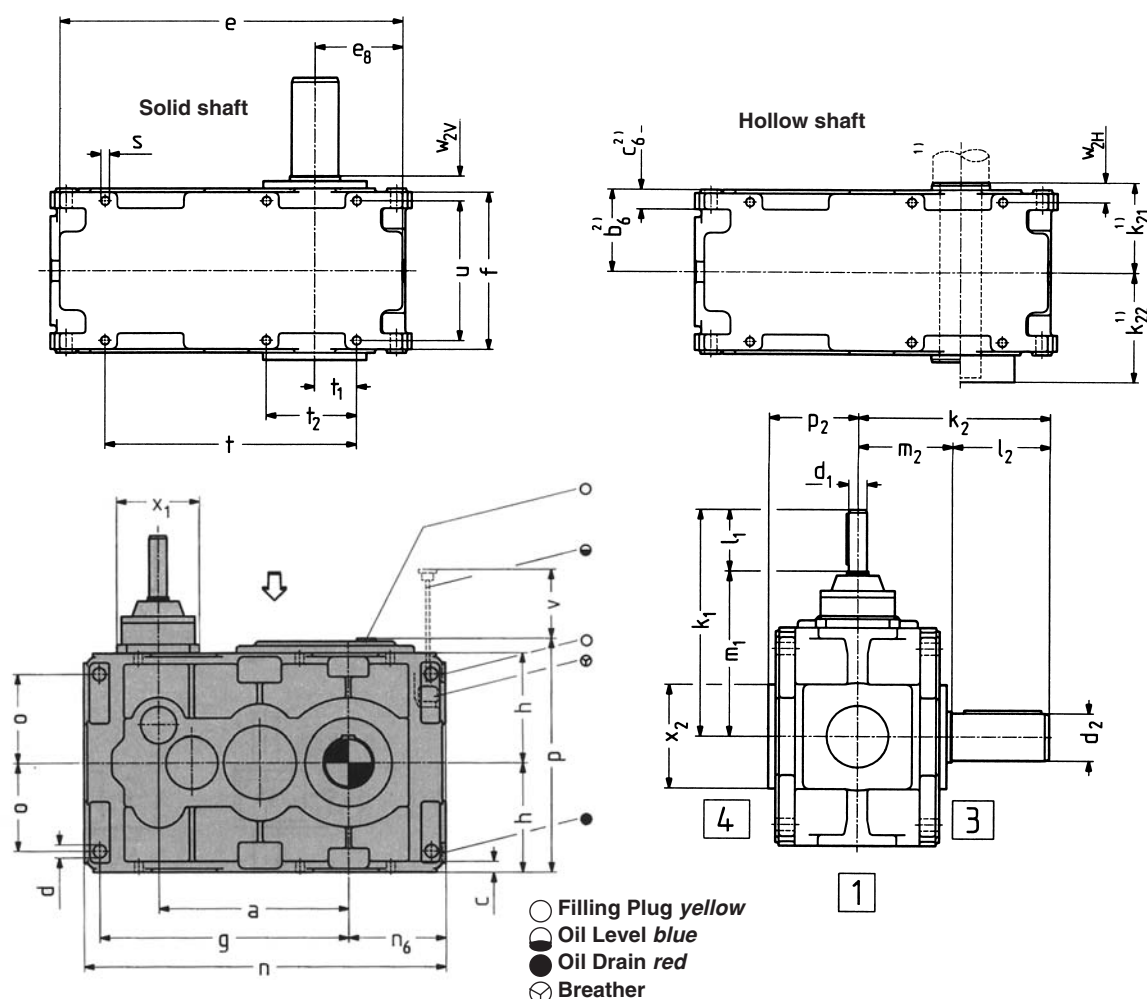


*) Only types PWC35 and PWC40

Dimensions

Type PWD 14-R1 ... PWD 31-R1

Add. lubrication required, please check-back



Type	Input shaft					Output shaft					Weight [kg]	Oil filling [l]
	Ø d1 k6	k1	l1	m1	Ø x1	Ø d2 m6	k2	l2	m2	Ø x2		
PWD 14	20	319	80	239	132	65	270	135	135	-	105	9
PWD 16	20	319	80	239	132	85	290	145	145	-	170	10
PWD 18	25	378	85	293	148	95	350	170	180	-	245	22
PWD 20	25	387	85	302	148	120	370	190	180	-	335	27
PWD 22	40	497	120	377	190	130	405	190	215	-	465	41
PWD 25	40	482	120	362	190	145	450	230	220	296	600	51
PWD 28	40	497	120	377	190	160	480	230	250	328	770	71
PWD 31	40	497	120	377	190	175	540	290	250	348	1060	93

Tapped centre holes in shaft ends DIN 332 Form DS				
d1, d2				
20	25	40	65...85	> 85
M 6	M 10	M 16	M 20	M 24

Keys to DIN 6885/1 supplied by ELECON

Type of protection as per IP 55

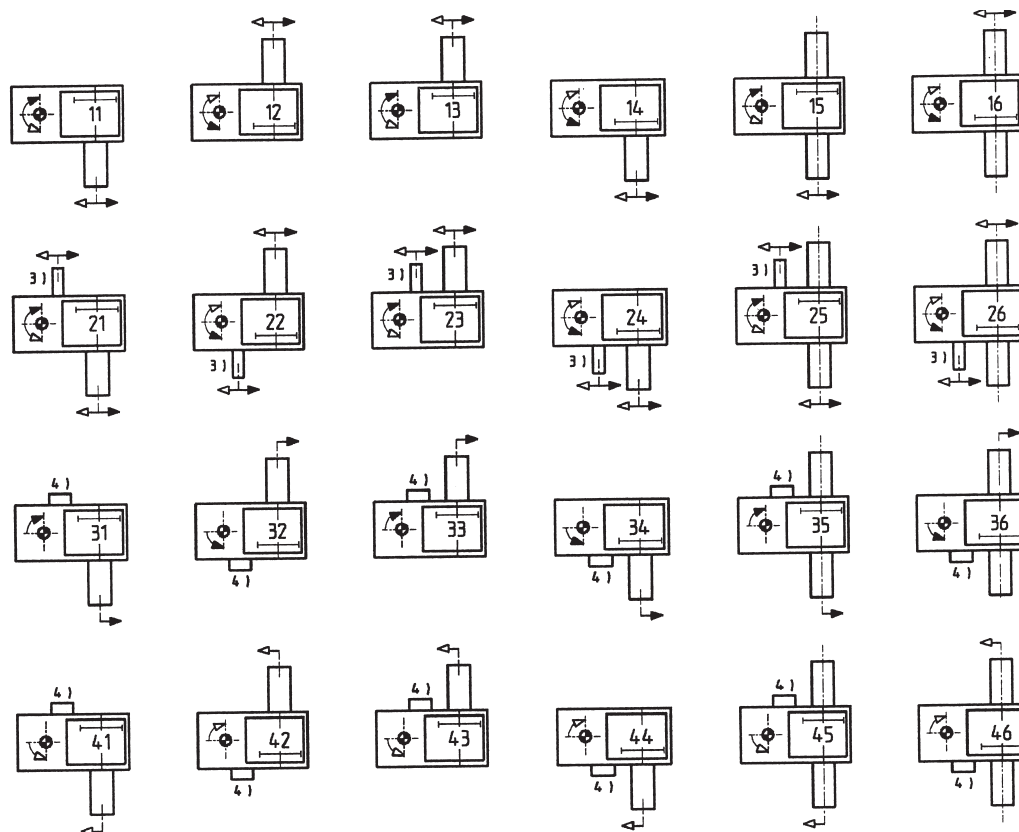
Type	a	b6	c	c6	Ø d H9	e	e8	f	g	h -0.2	n	n6	o	p	p2	Ø s	Fitting ds x lmax	t	t1	t2	u	v	w2v	w2H
PWD 14	262	113	15	27	16	474	121	216	344	150	500	134	121	333	-	12	M10x45	348	58	125	192	-	39	27
PWD 16	318	113	15	27	16	579	170	216	400	180	605	183	151	393	-	12	M10x80	453	107	217	192	20	49	27
PWD 18	366	147	18	32	22	622	155	284	458	190	654	171	155	419	-	14.5	M12x55	486	87	175	248	-	56	33
PWD 20	410	147	18	32	22	732	211	284	511	225	764	227	190	489	-	14.5	M12x90	596	143	285	248	-	56	33
PWD 22	464	179	24	41	26	782	193	346	580	235	826	215	190	513	-	18.5	M16x65	622	113	226	306	-	62	36
PWD 25	535	179	24	41	26	896	249	346	638	265	940	271	220	573	204	18.5	M16x90	736	169	340	306	-	67	62
PWD 28	585	210	28	48	33	948	230	408	706	280	1000	256	227	610	246	24	M20x80	752	132	265	360	-	70	70
PWD 31	653	210	28	48	33	1085	299	408	773	315	1137	325	262	680	239	24	M20x110	889	201	402	360	-	70	70

1) Hollow shaft and machine shaft see dimensions 900-0212-MB 1 and 900-0213-MB1

2) Torque arms see dimensions 900-0253-MB1

Location of input and output shafts

Directions of rotation viewing ↷

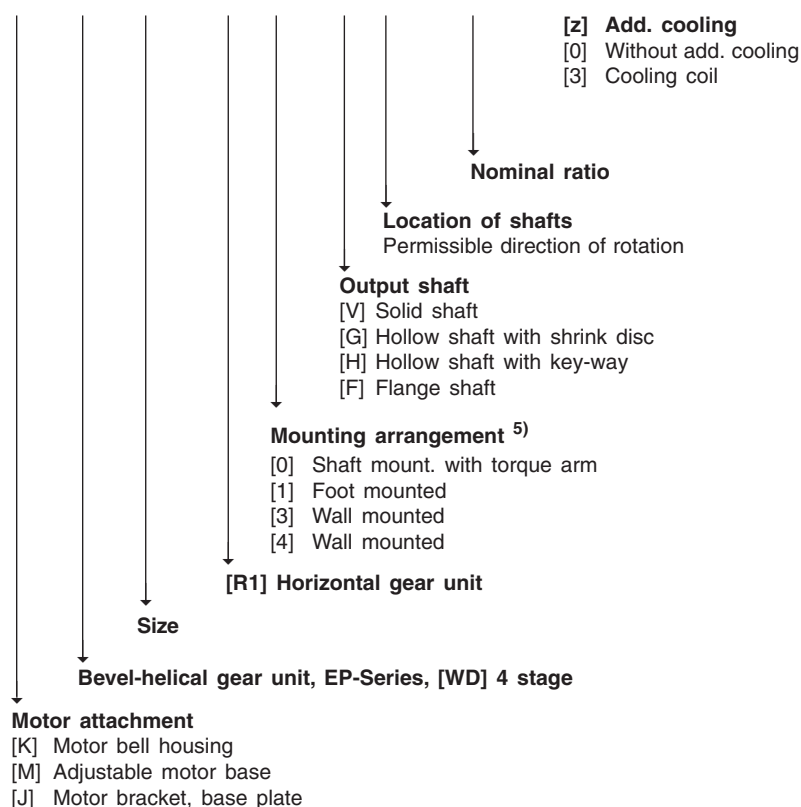


3) Add. shaft extension (900-1200-...)

4) Backstop, see 900-1254-MB1

K PWD 22 - R1 1 - V 11 - 250 - Z 3

Example

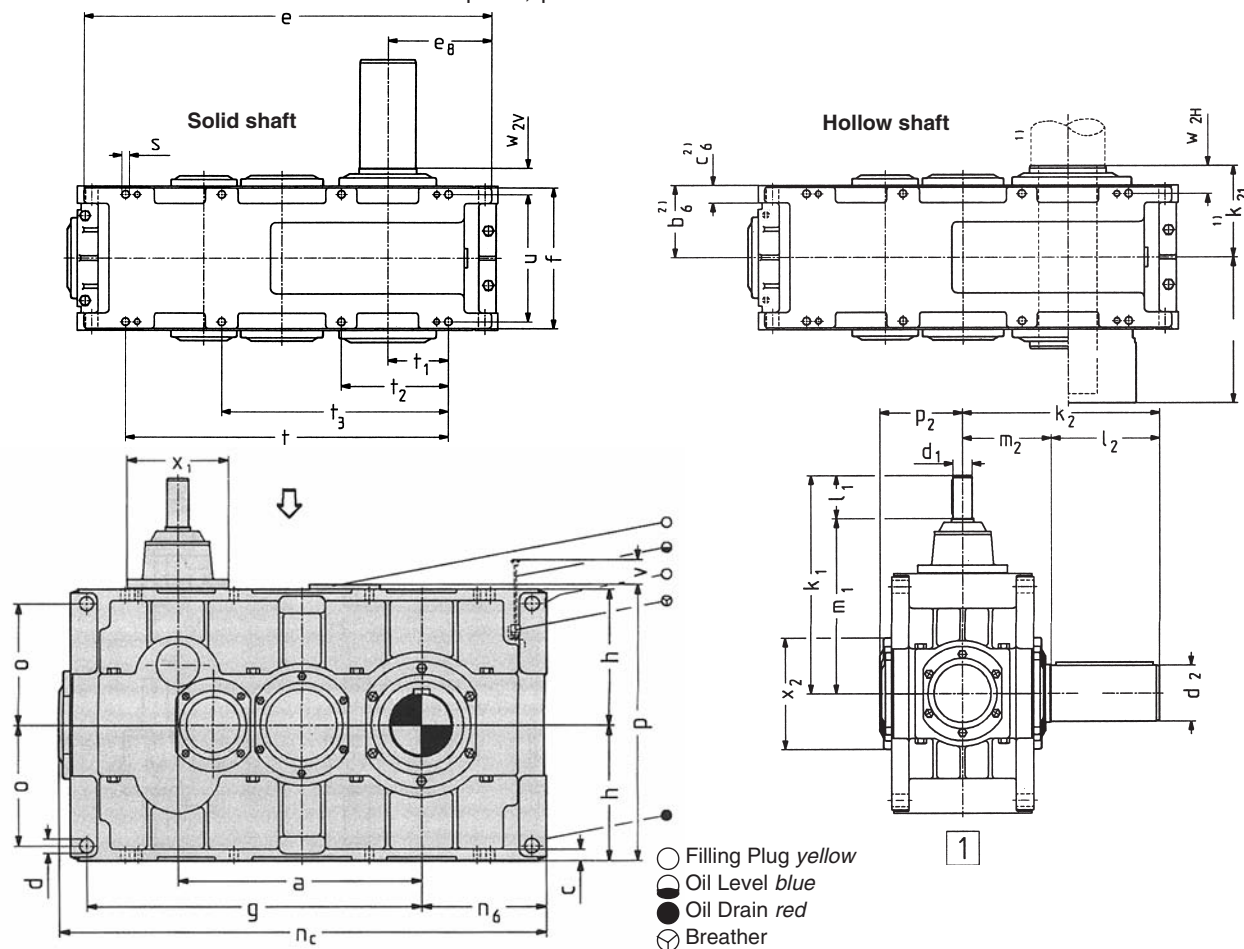


5) See dimension sheet 900-0220-MB9

Dimensions

Type PWD 35-R1 ... PWD 67-R1

Add. lubrication required, please check-back



Type	Input shaft				Output shaft				Weight [kg]	Oil filling [l]
	Ø d ₁ m6	k ₁	l ₁	m ₁	Ø x ₁	Ø d ₂ m6	k ₂	l ₂	m ₂	Ø x ₂
PWD 35	50k6	517	120	397	285	155	570	290	280	328
PWD 40	50k6	593	120	473	285	175	570	290	280	348
PWD 42	60	662	145	517	265	195	650	330	320	400
PWD 45	60	666	145	521	265	210	730	410	320	440
PWD 47	60	707	145	562	265	230	730	410	320	440
PWD 50	75	769	160	609	285	250	795	410	385	480
PWD 53	75	769	160	609	285	250	795	410	385	480
PWD 56	75	844	160	684	285	270	845	460	385	540
PWD 60	85	937	180	757	350	290	920	460	460	540
PWD 63	85	937	180	757	350	310	970	510	460	580
PWD 67	85	932	180	752	350	310	970	510	460	580

d ₁ , d ₂	50	60...85	≥ 155
Tapped centre holes in shaft ends DIN 332 Form DS	M 16	M 20	M 24

Keys to DIN 6885/1 supplied by ELECON

Type of protection as per IP 55

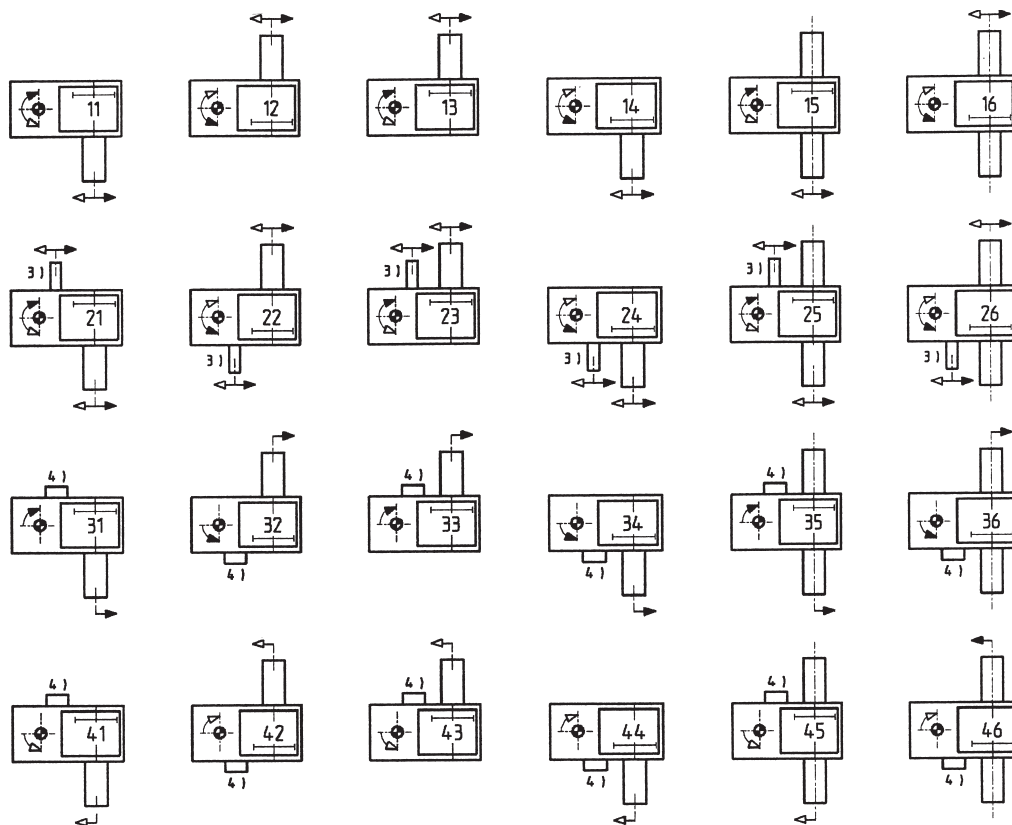
Type	a	b ₆	c	c ₆	Ø d _{H9}	e	e ₈	f	g	h _{-0.2}	n _c	n ₆	o	p	p ₂	Fitting Ø s ₁ d _s x l _{max}	t	t ₁	t ₂	t ₃	u	v	w _{2v}	w _{2H}
PWD 35	726	225	32	55	40	1275	325	438	925	300	1346	345	255	610	262	24 M20x85	1005	190	325	695	396	190	82	87
PWD 40	736	225	32	55	40	1430	403	438	1002	375	1501	423	330	760	262	24 M20x120	1157	265	477	847	396	220	82	87
PWD 42	837	265	40	62	45	1555	392	514	1134	355	1652	422	305	720	303	28 M24x100	1230	225	390	820	460	250	90	85
PWD 45	899	265	40	62	45	1689	460	514	1200	425	1786	490	375	860	303	28 M24x120	1356	285	516	946	460	250	90	90
PWD 47	924	265	40	62	52	1860	545	514	1285	500	1957	575	440	1010	303	28 M24x250	1527	370	687	1117	460	250	90	100
PWD 50	1070	320	50	75	60	1892	470	620	1392	425	1962	505	360	860	358	35 M30x120	1524	280	504	1014	560	250	105	110
PWD 53	1141	320	50	75	60	2038	545	620	1463	500	2108	580	435	1010	358	35 M30x180	1670	355	650	1160	560	250	105	110
PWD 56	1166	320	50	75	60	2231	645	620	1556	600	2301	680	535	1210	365	35 M30x250	1858	450	838	1348	560	250	105	110
PWD 60	1278	395	60	90	65	2272	565	770	1669	530	2342	600	460	1070	440	42 M36x150	1840	345	630	1200	690	350	115	120
PWD 63	1351	395	60	90	65	2420	640	770	1742	600	2490	675	530	1210	440	42 M36x200	1988	420	778	1348	690	350	115	120
PWD 67	1426	395	60	90	65	2566	715	770	1806	670	2636	750	590	1350	440	42 M36x250	2134	495	924	1494	690	350	115	120

1) Hollow shaft and machine shaft see dimensions 900-0212-MB 1 and 900-0213-MB1

2) Torque arms see dimensions 900-0253-MB1

Location of input and output shafts

Directions of rotation viewing ↗

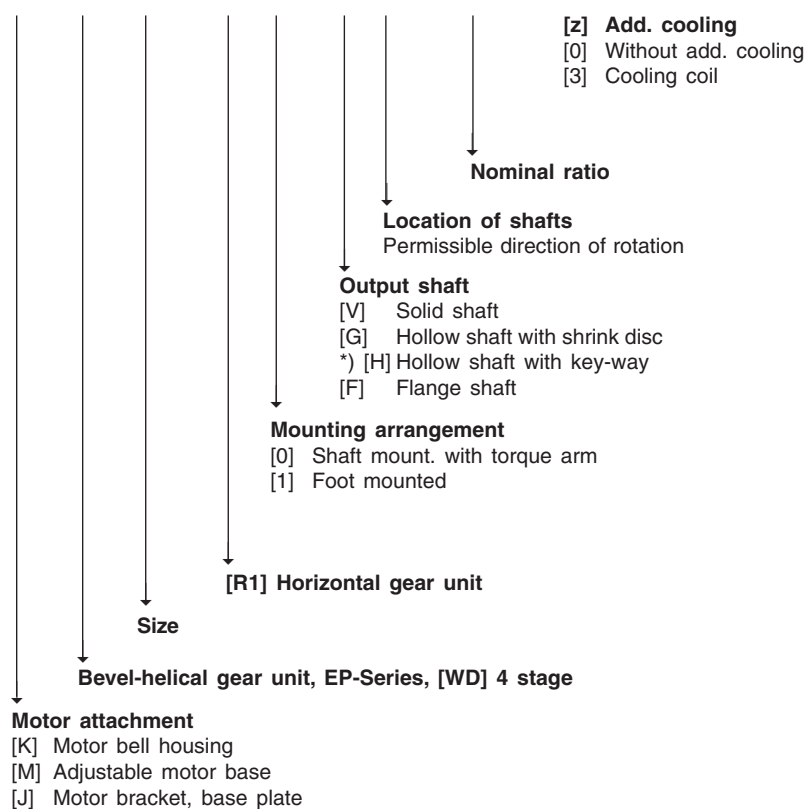


3) Add. shaft extension

4) Backstop, see 900-1254-MB1

K PWD 35 - R1 1 - V 11 - 250 - Z 3

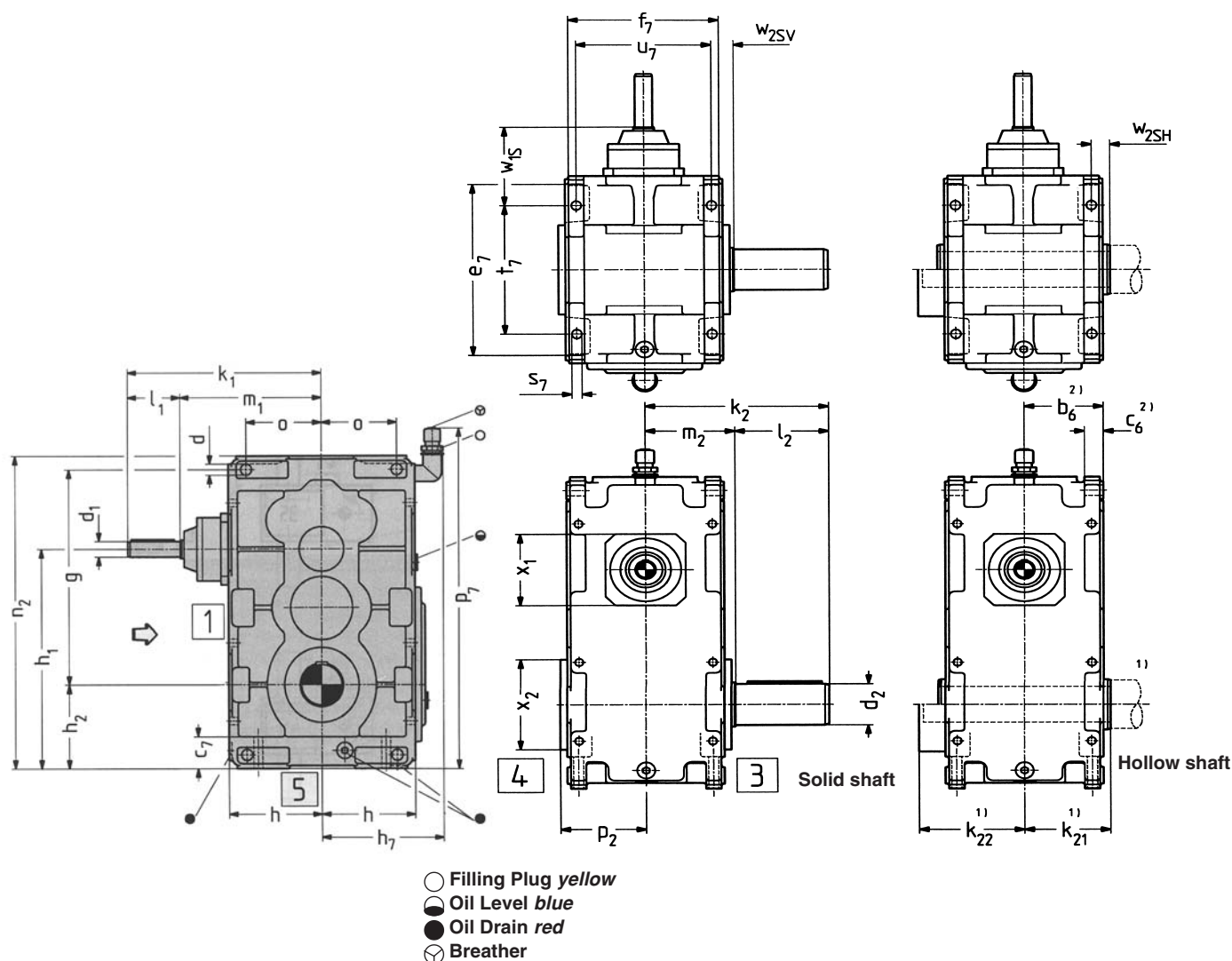
Example



*) Only types PWD35 and PWD40

Dimensions

Type PWC 14-S5 ... PWC 31-S5



Type	Input shaft					Output shaft					Weight [kg]	Oil filling [l]
	Ø d ₁ k ₆	k ₁	l ₁	m ₁	Ø x ₁	Ø d ₂ m ₆	k ₂	l ₂	m ₂	Ø x ₂		
PWC 14	25	312	85	227	148	65	270	135	135	-	115	10
PWC 16	25	312	85	227	148	85	290	145	145	-	170	16
PWC 18	40	406	120	286	190	95	350	170	180	-	245	24
PWC 20	40	406	120	286	190	120	370	190	180	-	335	33
PWC 22	50	447	120	327	225	130	405	190	215	-	460	44
PWC 25	50	447	120	327	225	145	450	230	220	296	595	59
PWC 28	60 _{m6}	522	145	377	255	160	480	230	250	328	775	74
PWC 31	60 _{m6}	522	145	377	255	175	540	290	250	348	1065	107

Tapped centre holes in shaft ends DIN 332 Form DS			
d ₁ , d ₂			
25	40...50	60...85	> 85
M 10	M 16	M 20	M 24

Keys to DIN 6885/1 supplied by ELECON

Type of protection as per IP 55

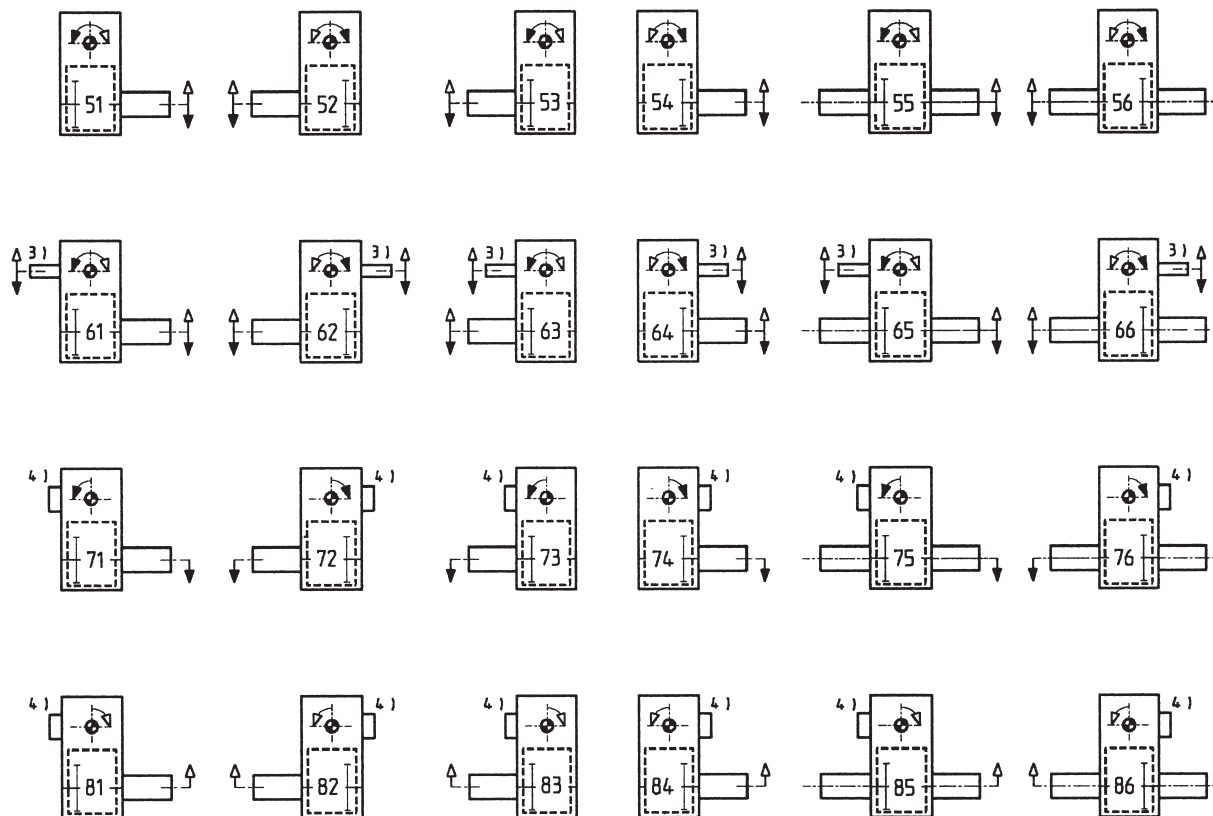
Type	b ₆	c ₆	c ₇	Ø d _{H9}	e ₇	f ₇	g	h _{-0.2}	h ₁	h ₂ -0.2	h ₇	n ₂	o	p ₂	p ₇	Fitting		t ₇	u ₇	w _{1s}	w _{2sv}	w _{2SH}
																Ø s ₇	d _s x l _{max}					
PWC 14	113	27	51	16	274	216	344	150	350	134	195	500	121	-	535	14.5	M12x90	206	194	124	38	26
PWC 16	113	27	51	16	334	216	400	180	455	183	225	605	151	-	640	14.5	M12x90	266	194	94	48	26
PWC 18	147	32	62	22	348	284	458	190	464	171	245	654	155	-	690	16.5	M14x100	260	258	156	51	28
PWC 20	147	32	62	22	414	284	511	225	574	227	280	764	190	-	795	16.5	M14x100	330	258	121	51	28
PWC 22	179	41	76	26	426	346	580	235	591	215	305	826	190	-	865	24	M20x130	326	312	164	59	33
PWC 25	179	41	77	26	486	346	638	265	705	271	335	940	220	204	980	24	M20x130	384	312	135	64	59
PWC 28	210	48	86	33	504	408	706	280	720	256	360	1000	227	246	1030	28	M24x150	386	366	184	67	67
PWC 31	210	48	95	33	574	408	773	315	857	325	395	1137	262	239	1165	28	M24x160	456	366	149	67	67

1) Hollow shaft and machine shaft see dimensions 900-0212-MB 1 and 900-0213-MB1

2) Torque arms see dimensions 900-0253-MB1

Location of input and output shafts

Directions of rotation viewing ↷

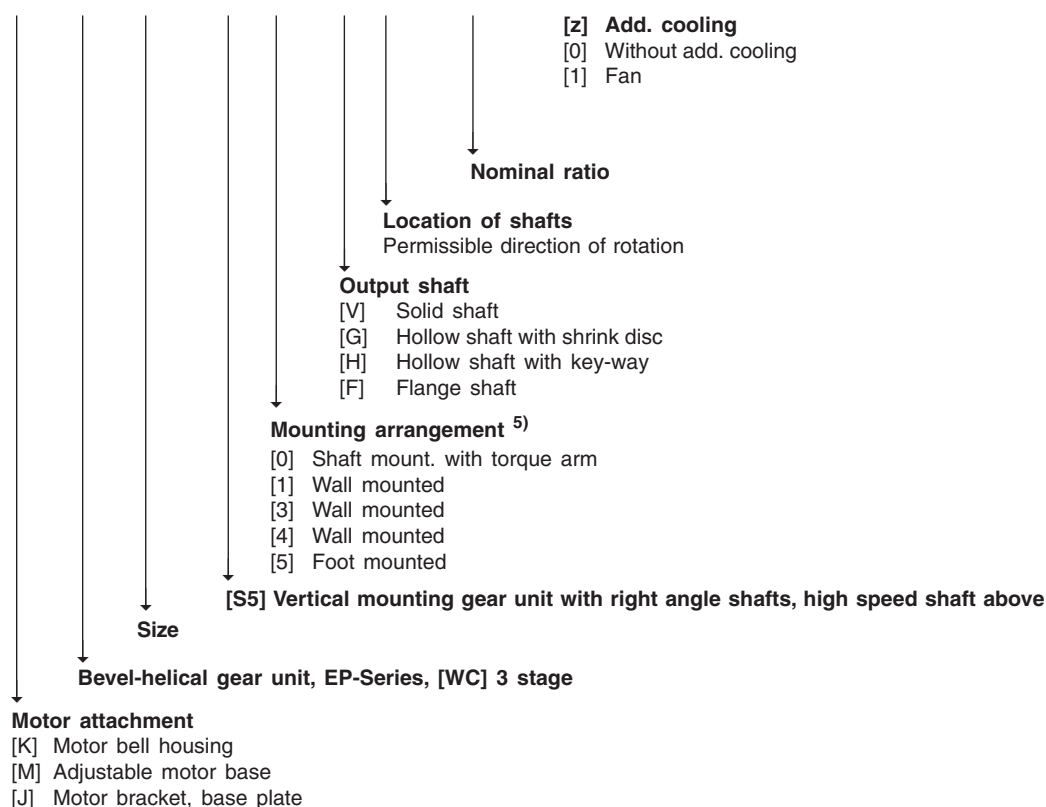


3) Add. shaft extension (900-1200-...)

4) Backstop, see 900-1254-MB1

K	PWC	22	-	S5	1	-	V	51	-	25	-	Z	1
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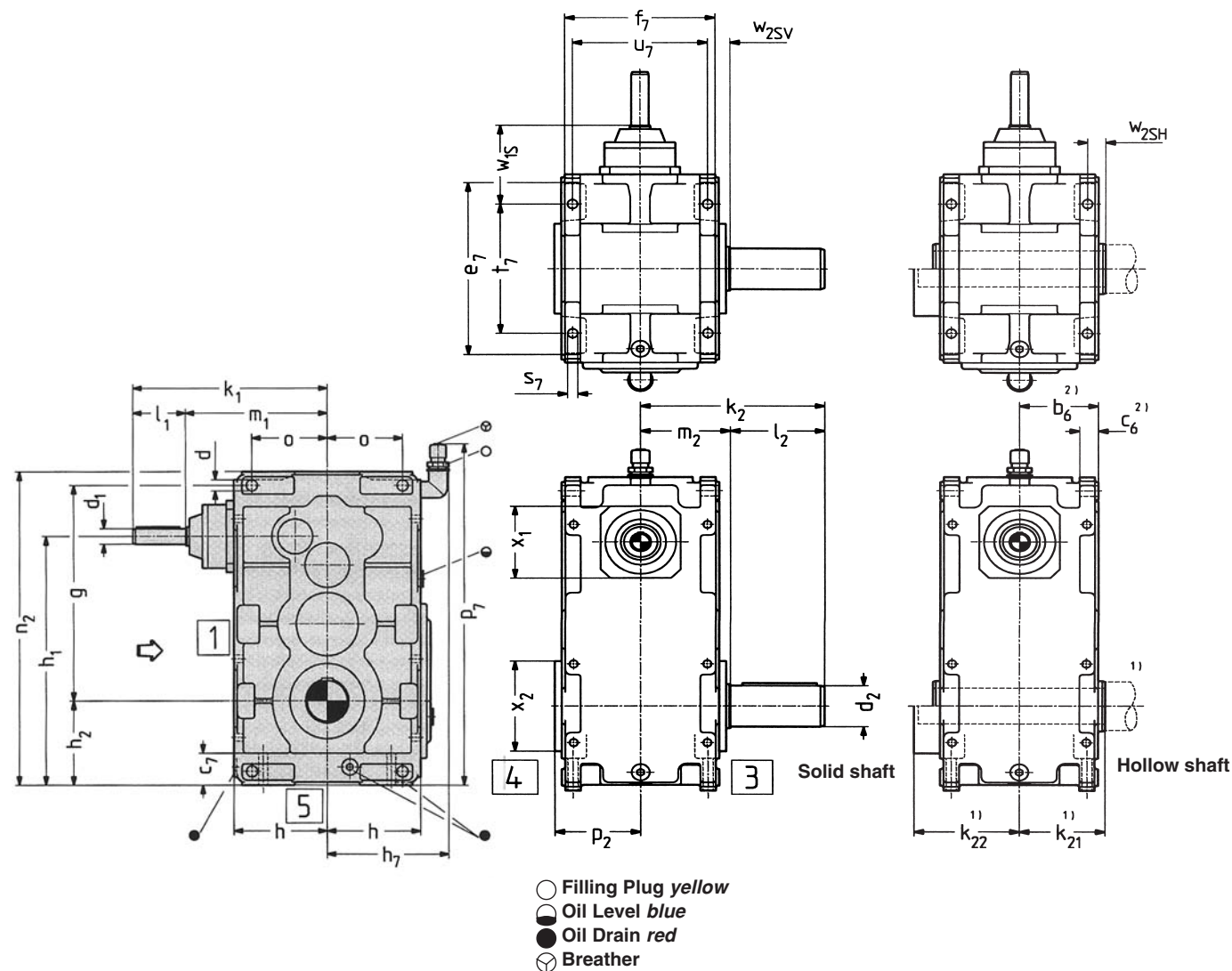
Example



5) See dimension sheet 900-0220-MB9

Dimensions

Type PWD 14-S5 ... PWD 31-S5



Type	Input shaft					Output shaft					Weight [kg]	Oil filling [l]
	Ø d ₁ k ₆	k ₁	l ₁	m ₁	Ø x ₁	Ø d ₂ m ₆	k ₂	l ₂	m ₂	Ø x ₂		
PWD 14	20	319	80	239	132	65	270	135	135	-	105	12
PWD 16	20	319	80	239	132	85	290	145	145	-	170	18
PWD 18	25	378	85	293	148	95	350	170	180	-	245	30
PWD 20	25	387	85	302	148	120	370	190	180	-	335	38
PWD 22	40	497	120	377	190	130	405	190	215	-	465	54
PWD 25	40	482	120	362	190	145	450	230	220	296	600	72
PWD 28	40	497	120	377	190	160	480	230	250	328	770	91
PWD 31	40	497	120	377	190	175	540	290	250	348	1060	130

Tapped centre holes in shaft ends DIN 332 Form DS				
d ₁ , d ₂				
20	25	40	65...85	> 85
M 6	M 10	M 16	M 20	M 24

Keys to DIN 6885/1 supplied by ELECON

Type of protection as per IP 55

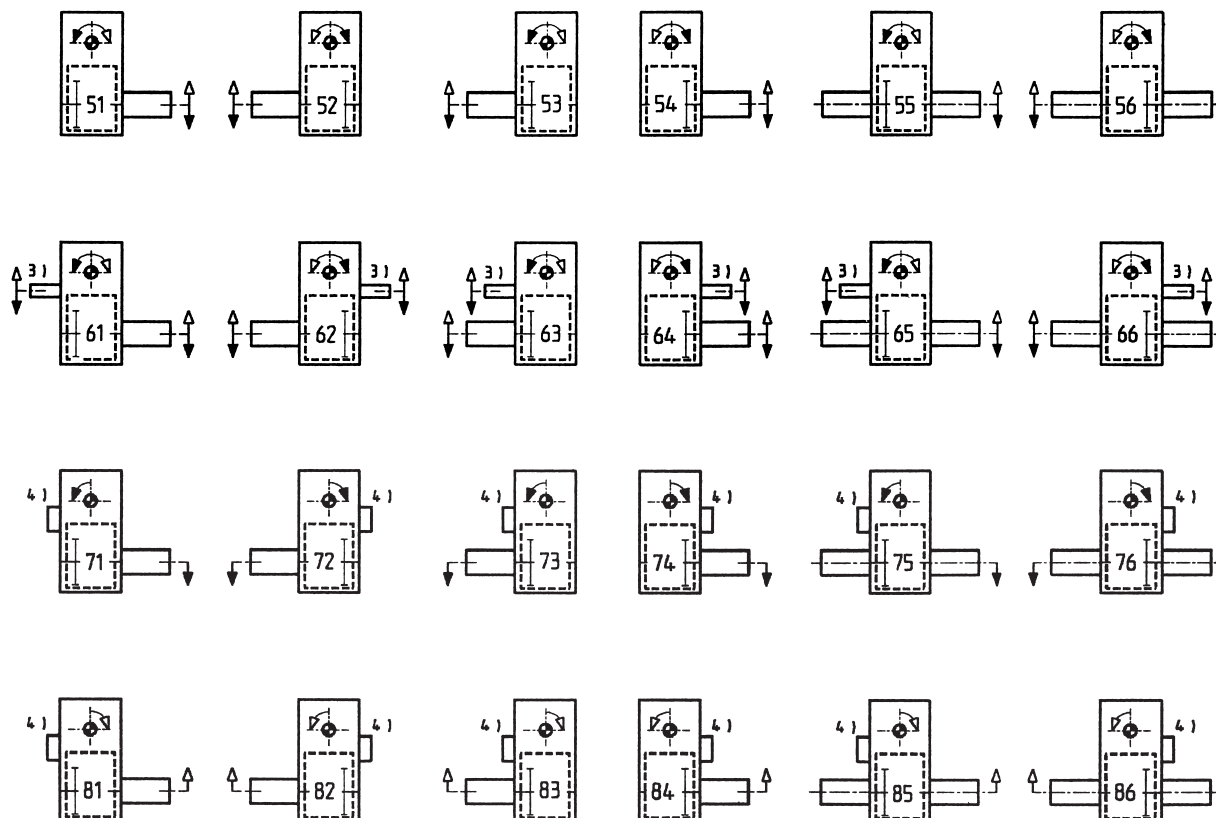
Type	b ₆	c ₆	c ₇	Ø d _{H9}	e ₇	f ₇	g	h _{-0.2}	h ₁	h ₂ -0.2	h ₇	n ₂	o	p ₂	p ₇	Fitting		t ₇	u ₇	w _{1s}	w _{2Sv}	w _{2SH}
																Ø s ₇	d _s x l _{max}					
PWD 14	113	27	51	16	274	216	344	150	396	134	195	500	121	-	535	14.5	M12x90	206	194	136	38	26
PWD 16	113	27	51	16	334	216	400	180	501	183	225	605	151	-	640	14.5	M12x90	266	194	106	48	26
PWD 18	147	32	62	22	348	284	458	190	537	171	245	654	155	-	690	16.5	M14x100	260	258	163	51	28
PWD 20	147	32	62	22	414	284	511	225	637	227	280	764	190	-	795	16.5	M14x100	330	258	137	51	28
PWD 22	179	41	76	26	426	346	580	235	679	215	305	826	190	-	865	24	M20x130	326	312	214	59	33
PWD 25	179	41	77	26	486	346	638	265	806	271	335	940	220	204	980	24	M20x130	384	312	170	64	59
PWD 28	210	48	86	33	504	408	706	280	841	256	360	1000	227	246	1030	28	M24x150	386	366	184	67	67
PWD 31	210	48	95	33	574	408	773	315	978	325	395	1137	262	239	1165	28	M24x160	456	366	149	67	67

1) Hollow shaft and machine shaft see dimensions 900-0212-MB 1 and 900-0213-MB1

2) Torque arms see dimensions 900-0253-MB1

Location of input and output shafts

Directions of rotation viewing ↷

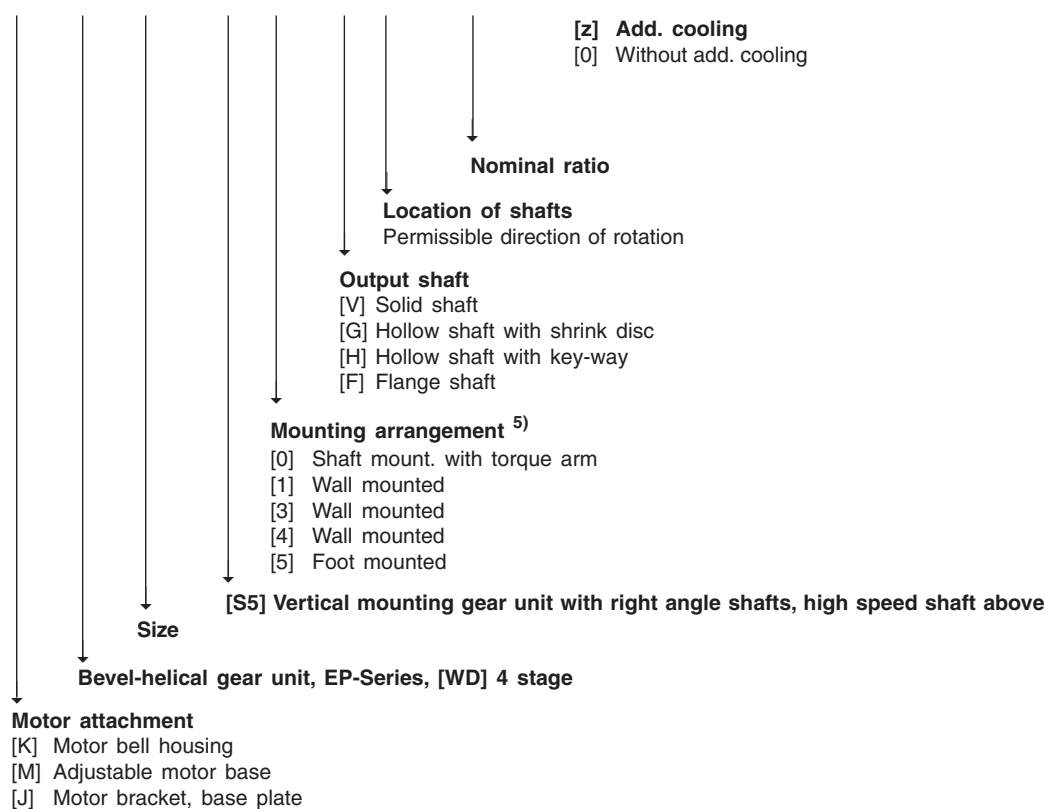


3) Add. shaft extension (900-1200-...)

4) Backstop, see 900-1254-MB1

K	PWD	22	-	S5	5	-	V	51	-	250	-	Z	0
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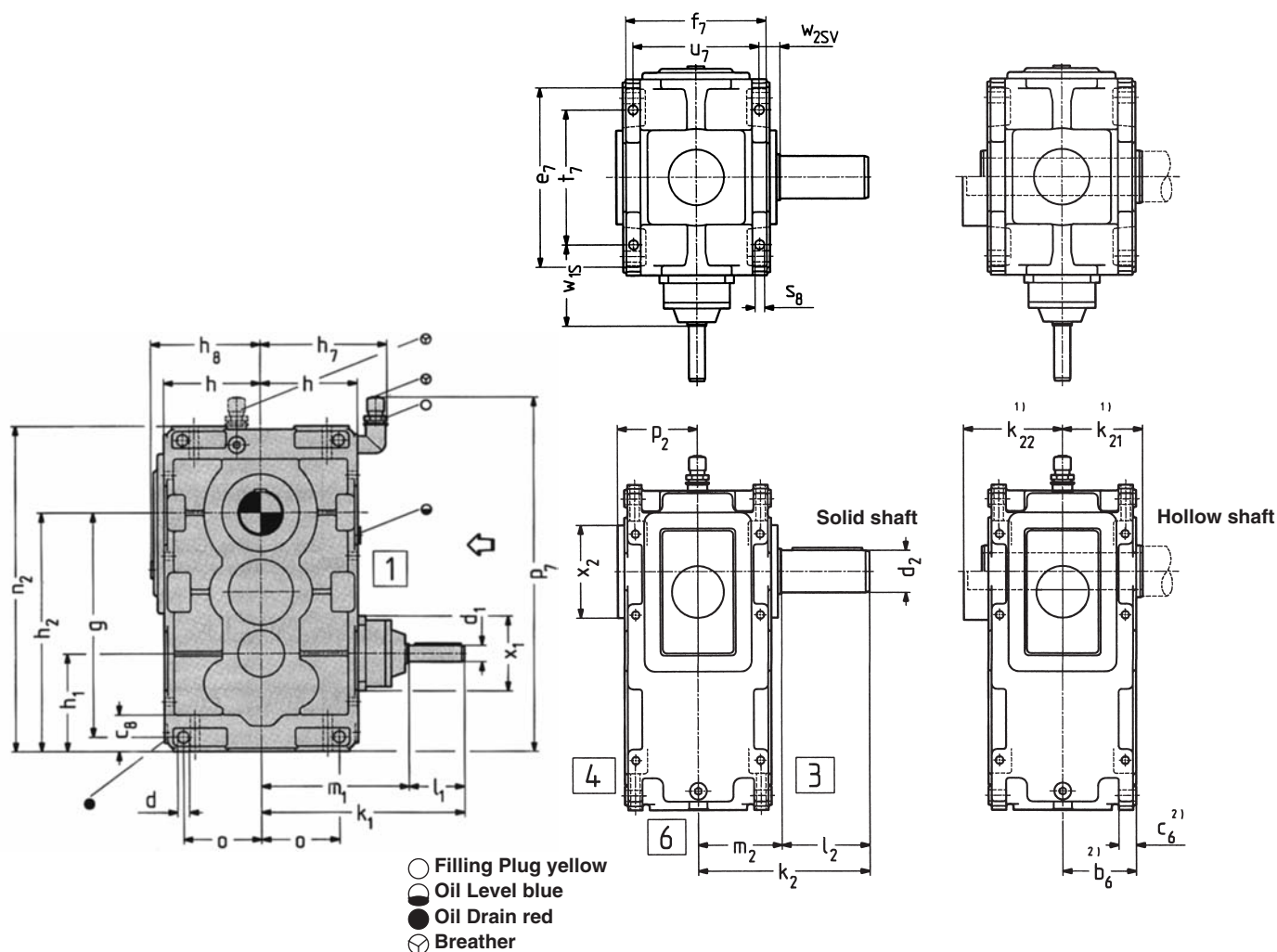
Example



5) See dimension sheet 900-0220-MB9

Dimensions

Type PWC 14-T6 ... PWC 31-T6



Type	Input shaft					Output shaft					Weight [kg]	Oil filling [l]
	$\varnothing d_1$ k6	k1	l1	m1	$\varnothing x_1$	$\varnothing d_2$ m6	k2	l2	m2	$\varnothing x_2$		
PWC 14	25	312	85	227	148	65	270	135	135	-	115	9
PWC 16	25	312	85	227	148	85	290	145	145	-	170	14
PWC 18	40	406	120	286	190	95	350	170	180	-	245	23
PWC 20	40	406	120	286	190	120	370	190	180	-	335	29
PWC 22	50	447	120	327	225	130	405	190	215	-	460	45
PWC 25	50	447	120	327	225	145	450	230	220	296	595	54
PWC 28	60m6	522	145	377	255	160	480	230	250	328	775	75
PWC 31	60m6	522	145	377	255	175	540	290	250	348	1065	97

Tapped centre holes in shaft ends
DIN 332 Form DS

d_1, d_2			
25	40...50	60...85	> 85
M 10	M 16	M 20	M 24

Keys to DIN 6885/1 supplied by ELECON

Type of protection as per IP 55

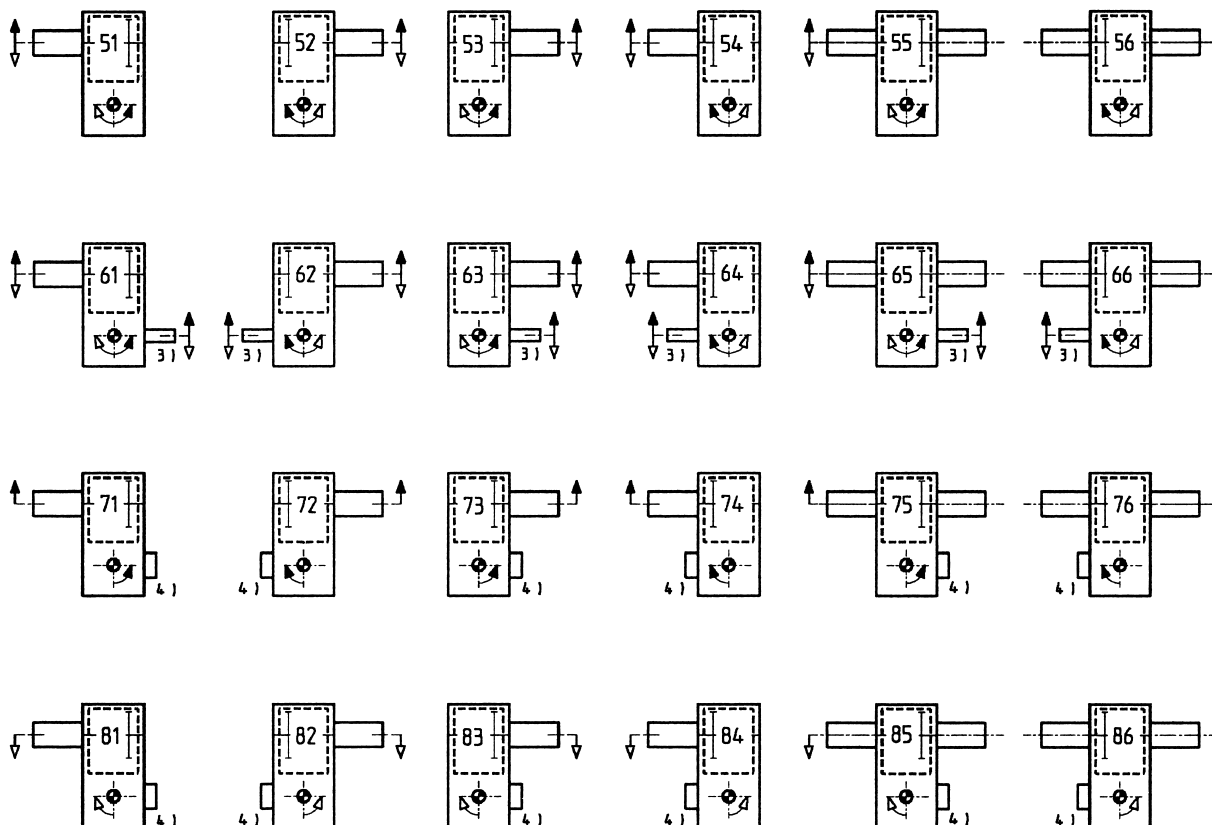
Type	b_6	c_6	c_8	$\varnothing d$ H9	e_7	f_7	g	h -0.2	h_1 -0.2	h_2	h_7	h_8	n_2	o	p_2	p_7	Fitting		t_7	u_7	w_{1S}	w_{2SV}	w_{2SH}
																	$\varnothing s_8$	$d_s \times l_{max}$					
PWC 14	113	27	57	16	274	216	344	150	150	366	195	183	500	121	-	535	14.5	M12x90	206	194	124	38	26
PWC 16	113	27	57	16	334	216	400	180	150	422	225	213	605	151	-	640	14.5	M12x90	266	194	94	48	26
PWC 18	147	32	64	22	348	284	458	190	190	483	245	229	654	155	-	690	16.5	M14x100	260	258	156	51	28
PWC 20	147	32	64	22	414	284	511	225	190	537	280	264	764	190	-	795	16.5	M14x100	330	258	121	51	28
PWC 22	179	41	76	26	426	346	580	235	235	611	305	278	826	190	-	865	24	M20x130	326	312	164	59	33
PWC 25	179	41	77	26	486	346	638	265	235	669	335	308	940	220	204	980	24	M20x130	384	312	135	64	59
PWC 28	210	48	92	33	504	408	706	280	280	744	360	330	1000	227	246	1030	28	M24x150	386	366	184	67	67
PWC 31	210	48	95	33	574	408	773	315	280	812	395	365	1137	262	239	1165	28	M24x160	456	366	149	67	67

1) Hollow shaft and machine shaft see dimensions 900-0212-MB 1 and 900-0213-MB1

2) Torque arms see dimensions 900-0253-MB1

Location of input and output shafts

Directions of rotation viewing ↷

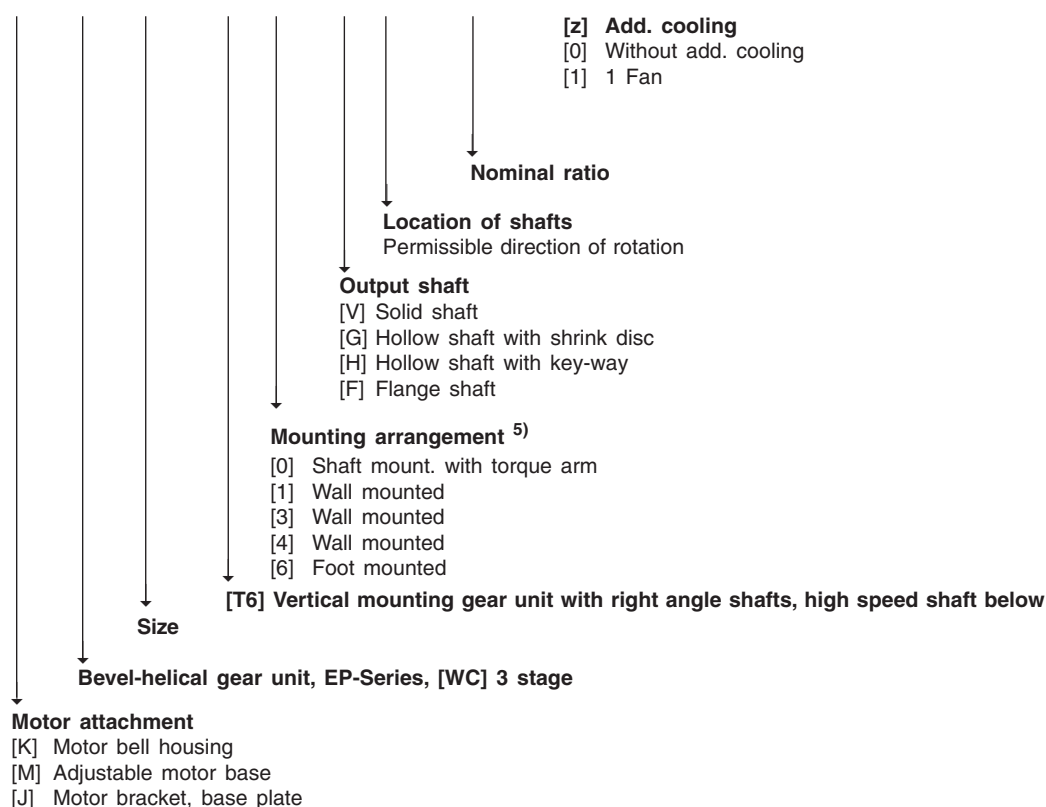


3) Add. shaft extension (900-1200-...)

4) Backstop, see 900-1254-MB1

K	PWC	22	-	T6	6	-	V	51	-	25	-	Z	1
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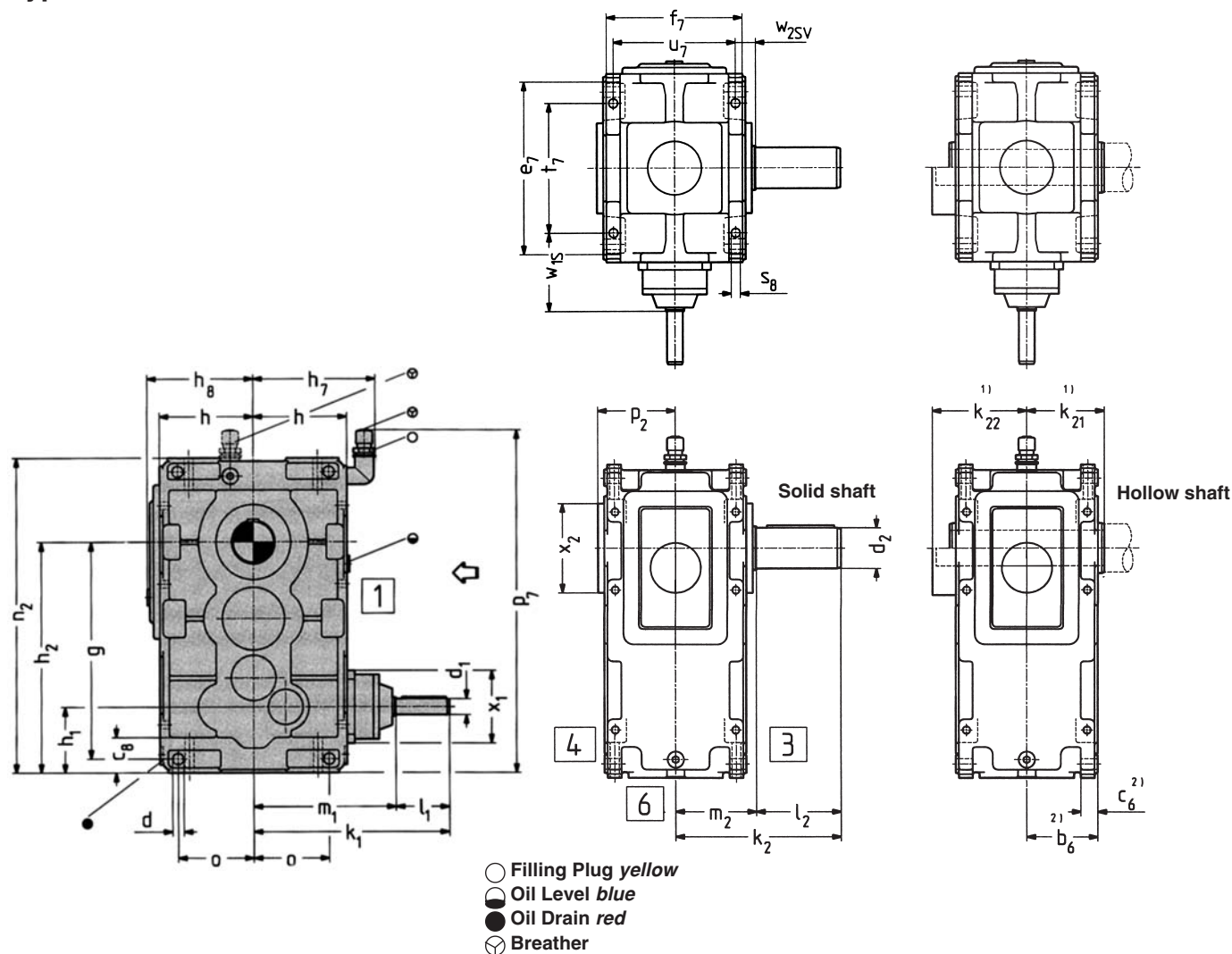
Example



5) See dimension sheet 900-0220-MB9

Dimensions

Type PWD 14-T6 ... PWD 31-T6



Type	Input shaft					Output shaft					Weight [kg]	Oil filling [l]
	Ø d1 k6	k1	l1	m1	Ø x1	Ø d2 m6	k2	l2	m2	Ø x2		
PWD 14	20	319	80	239	132	65	270	135	135	-	105	9
PWD 16	20	319	80	239	132	85	290	145	145	-	170	14
PWD 18	25	378	85	293	148	95	350	170	180	-	245	23
PWD 20	25	387	85	302	148	120	370	190	180	-	335	30
PWD 22	40	497	120	377	190	130	405	190	215	-	465	45
PWD 25	40	482	120	362	190	145	450	230	220	296	600	55
PWD 28	40	497	120	377	190	160	480	230	250	328	770	76
PWD 31	40	497	120	377	190	175	540	290	250	348	1060	99

Tapped centre holes in shaft ends DIN 332 Form DS				
d1, d2				
20	25	40	65...85	> 85
M 6	M 10	M 16	M 20	M 24

Keys to DIN 6885/1 supplied by ELECON

Type of protection as per IP 55

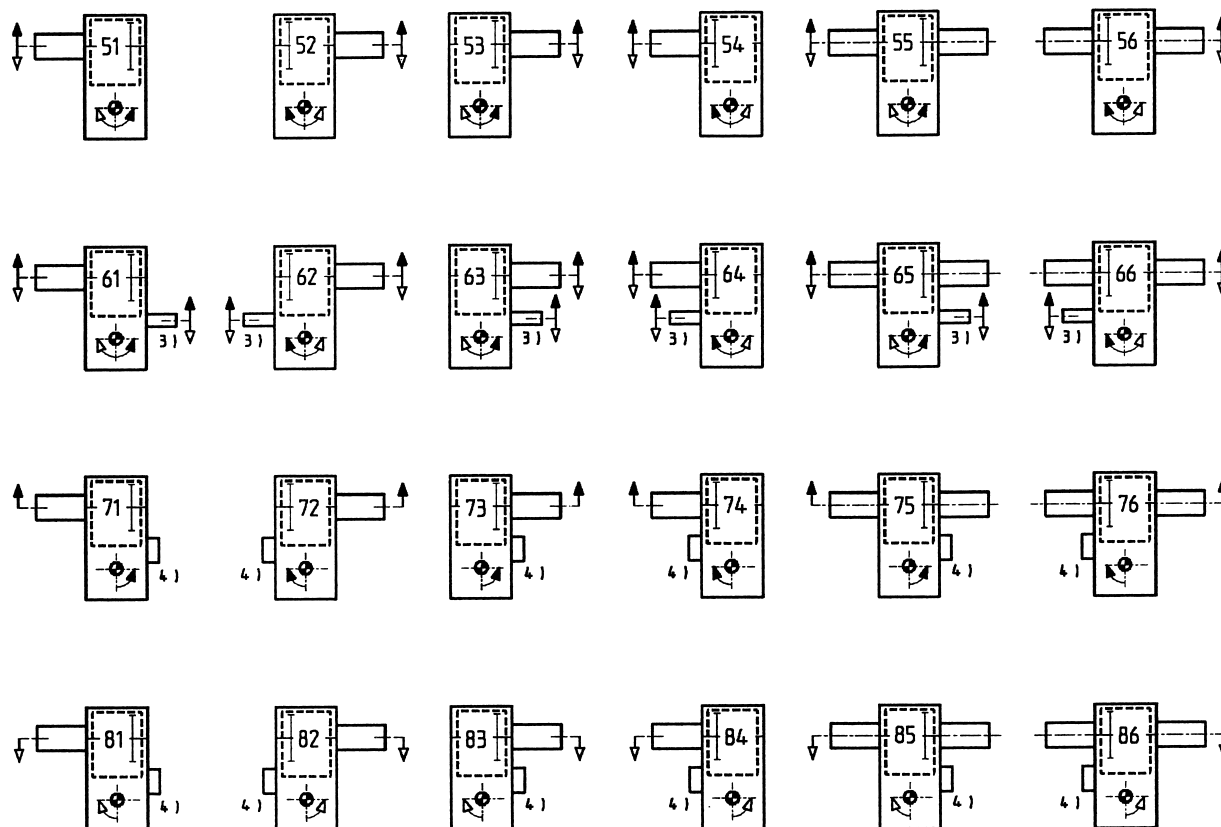
Type	b6	c6	c8	Ø d H9	e7	f7	g	h -0.2	h1 -0.2	h2	h7	h8	n2	o	p2	p7	Fitting		t7	u7	W1s	W2sv	W2SH
																	Ø s8	ds x lmax					
PWD 14	113	27	57	16	274	216	344	150	104	366	195	183	500	121	-	535	14.5	M12x90	206	194	136	38	26
PWD 16	113	27	57	16	334	216	400	180	104	422	225	213	605	151	-	640	14.5	M12x90	266	194	106	48	26
PWD 18	147	32	64	22	348	284	458	190	117	483	245	229	654	155	-	690	16.5	M14x100	260	258	163	51	28
PWD 20	147	32	64	22	414	284	511	225	127	537	280	264	764	190	-	795	16.5	M14x100	330	258	137	51	28
PWD 22	179	41	76	26	426	346	580	235	147	611	305	278	826	190	-	865	24	M20x130	326	312	214	59	33
PWD 25	179	41	77	26	486	346	638	265	134	669	335	308	940	220	204	980	24	M20x130	384	312	170	64	59
PWD 28	210	48	92	33	504	408	706	280	159	744	360	330	1000	227	246	1030	28	M24x150	386	366	184	67	67
PWD 31	210	48	95	33	574	408	773	315	159	812	395	365	1137	262	239	1165	28	M24x160	456	366	149	67	67

1) Hollow shaft and machine shaft see dimensions 900-0212-MB 1 and 900-0213-MB1

2) Torque arms see dimensions 900-0253-MB1

Location of input and output shafts

Directions of rotation viewing ↷

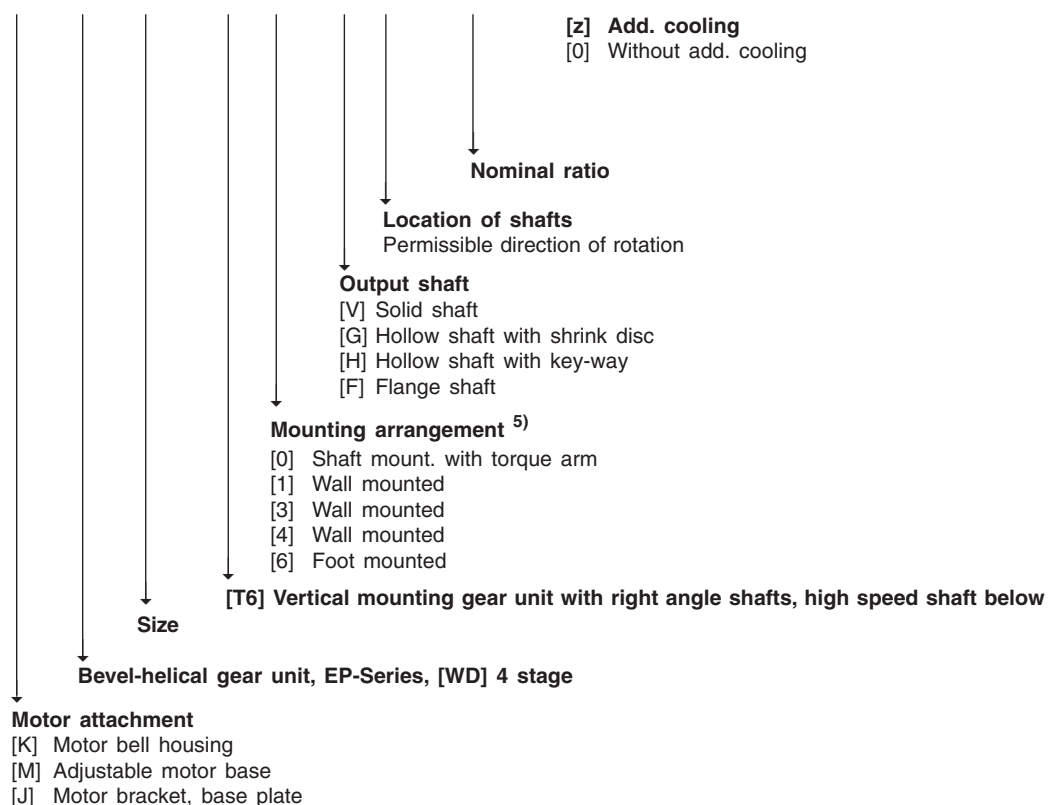


3) Add. shaft extension (900-1200-...)

4) Backstop, see 900-1254-MB1

K	PWD	22	-	T6	6	-	V	51	-	250	-	Z	0
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Example

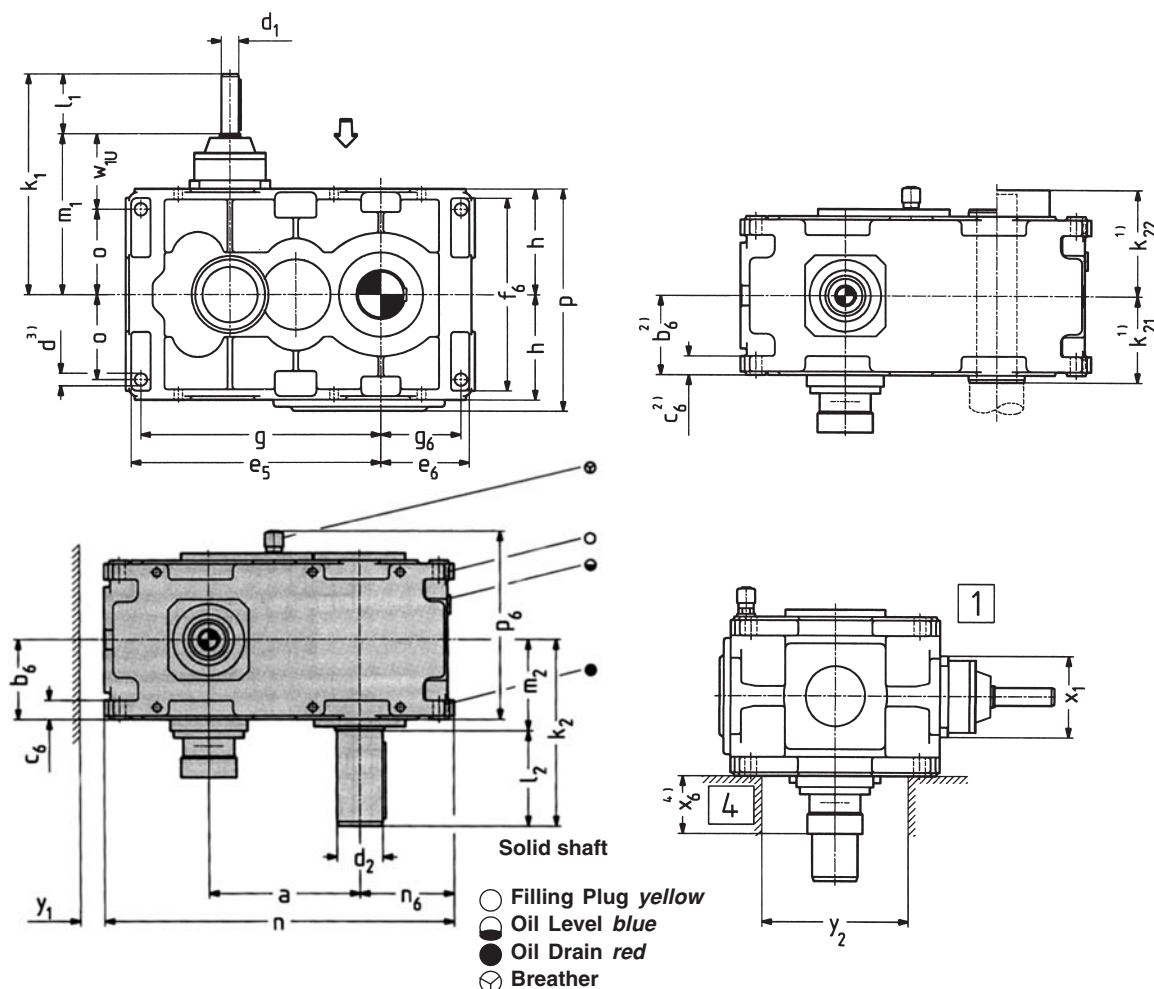


5) See dimension sheet 900-0220-MB9

Dimensions

Type PWC 14-U4 ... PWC 31-U4

Add. lubrication required, please check-back



Type	Input shaft						Output shaft						Weight [kg]	Oil filling [l]
	Ø d1	k1	l1	m1	Ø x1	y1	Ø d2 m6	k2	l2	m2	Ø x2	y2		
PWC 14	25 k6	312	85	227	148	100	65	270	135	135	-	210	125	10
PWC 16	25 k6	312	85	227	148	100	85	290	145	145	-	270	180	15
PWC 18	40 k6	406	120	286	190	100	95	350	170	180	-	270	255	26
PWC 20	40 k6	406	120	286	190	100	120	370	190	180	-	340	345	34
PWC 22	50 m6	447	120	327	225	100	130	405	190	215	-	330	470	48
PWC 25	50 m6	447	120	327	225	100	145	450	230	220	-	390	605	52
PWC 28	60 m6	522	145	377	255	100	160	480	230	250	-	400	785	82
PWC 31	60 m6	522	145	377	255	100	175	540	290	250	-	470	1075	93

Tapped centre holes in shaft ends DIN 332 Form DS			
d1, d2			
25	40...50	60...85	> 85
M 10	M 16	M 20	M 24

Keys to DIN 6885/1 supplied by ELECON

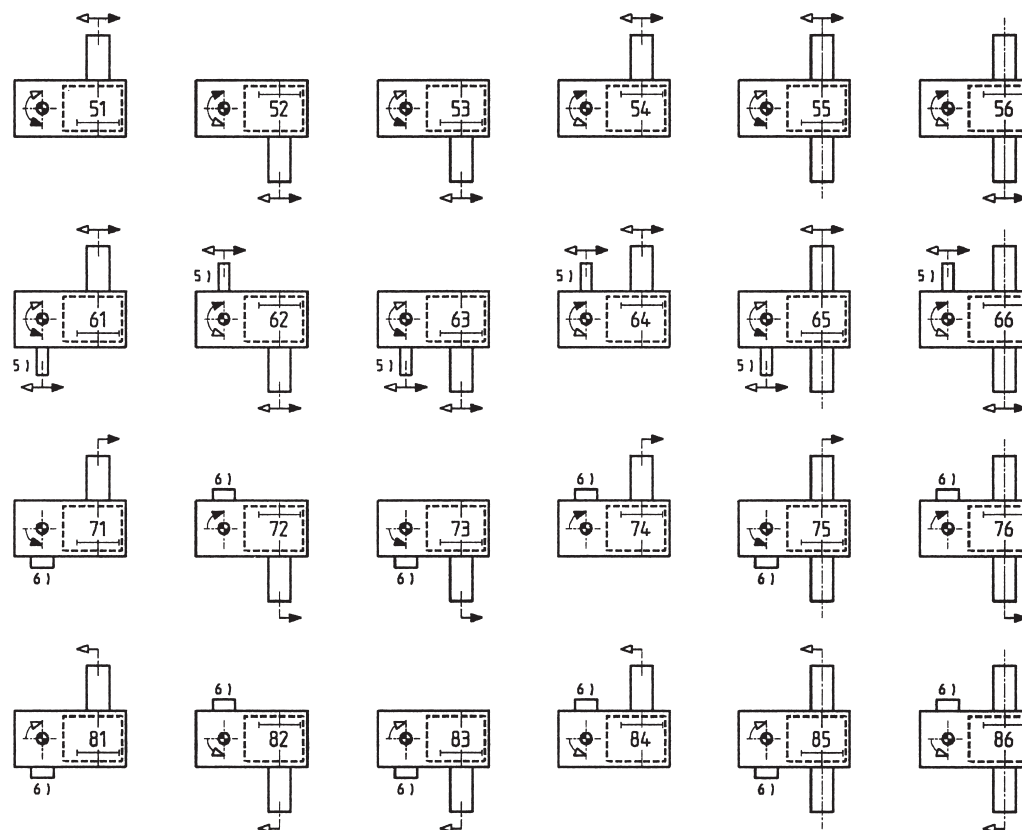
Type of protection as per IP 55

Type	a	b6 -0.2	c6	Ø d H9	e5	e6	f6	g	g6	h -0.2	n	n6	o	p	p2	p6	Fitting		w1U	x6
																	Ø d H9	dsX lmax 3)		
PWC 14	216	113	27	16	357	126	274	344	113	150	500	134	121	333	-	270	16	M14x65	106	130
PWC 16	272	113	27	16	413	175	334	400	162	180	605	183	151	313	-	270	16	M14x65	76	130
PWC 18	293	147	32	22	475	162	348	458	145	190	654	171	155	419	-	340	22	M20x80	131	130
PWC 20	347	147	32	22	528	218	418	511	201	225	764	227	190	489	-	340	22	M20x80	96	130
PWC 22	376	179	41	26	600	200	426	580	180	235	826	215	190	513	-	416	26	M24x100	137	130
PWC 25	434	179	41	26	658	256	486	638	236	265	940	271	220	573	204	416	26	M24x100	107	130
PWC 28	464	210	48	33	731	245	508	706	221	280	1000	256	227	610	246	480	33	M30x120	150	130
PWC 31	532	210	48	33	798	307	578	773	282	315	1137	325	262	680	239	480	33	M30x120	115	130

- 1) Dimensions of hollow shaft and machine shaft on request
- 2) Torque arms see dimensions 900-0253-MB1
- 3) Holding down bolts of min. property class 10.9
- 4) Available for shaft d1: $n \geq 1000 \text{ min}^{-1}$; lower speed on request.

Location of input and output shafts

Directions of rotation viewing ↗

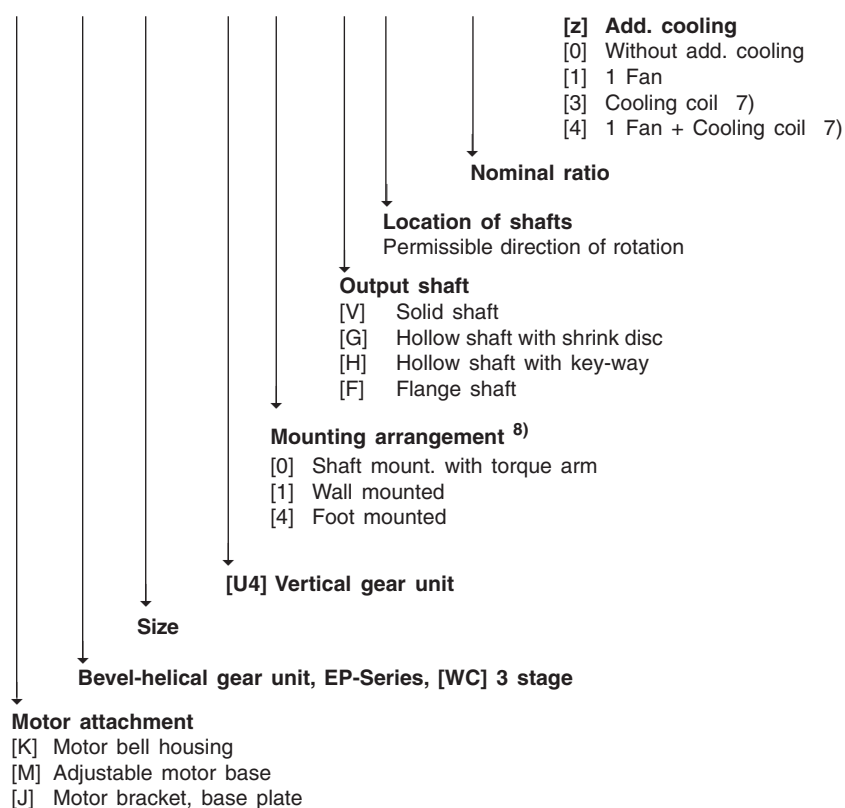


5) Add. shaft extension (900-1200-...)

6) Backstop, see 900-1254-MB1

K	PWC	22	-	U4	4	-	V	51	-	25	-	Z	3
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Example



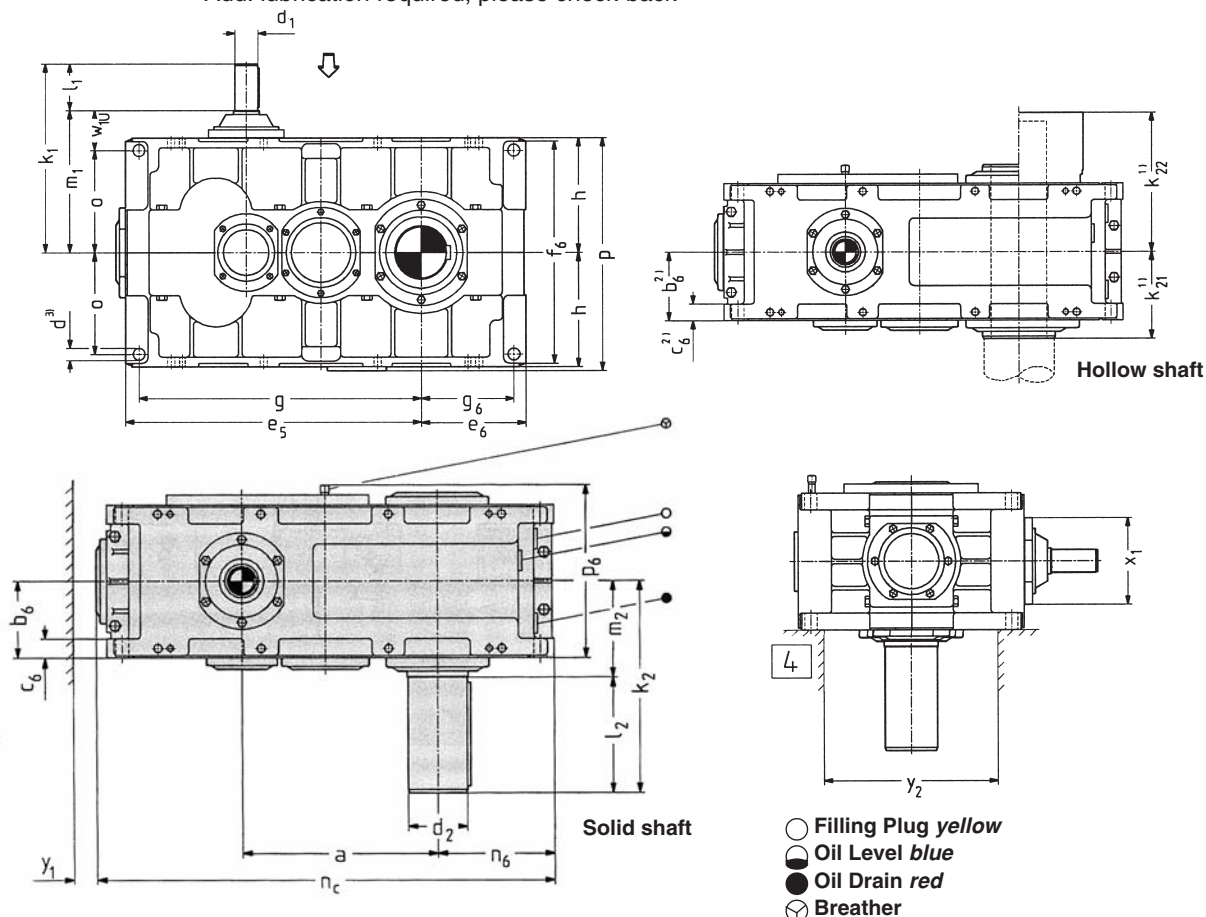
7) Only location of shafts : .2, .4 and .6

8) See dimension sheet 900-0220-MB9

Dimensions

Type PWC 35-U4 ... PWC 67-U4

Add. lubrication required, please check-back



Type	Input shaft						Output shaft						Weight [kg]	Oil filling [l]
	Ø d ₁ m6	k ₁	l ₁	m ₁	Ø x ₁	y ₁	Ø d ₂ m6	k ₂	l ₂	m ₂	Ø x ₂	y ₂		
PWC 35	75	644	160	484	285	100	155	570	290	280	328	440	1530	95
PWC 40	75	644	160	484	285	100	175	570	290	280	348	590	1860	130
PWC 42	85	762	180	582	350	100	195	650	330	320	400	530	2230	155
PWC 45	85	762	180	582	350	100	210	730	410	320	440	670	2780	225
PWC 47	85	762	180	582	350	100	230	730	410	320	440	780	3330	305
PWC 50	100	935	215	720	440	100	250	795	410	385	480	590	4300	290
PWC 53	100	935	215	720	440	100	250	795	410	385	480	740	4900	400
PWC 56	100	935	215	720	440	100	270	845	460	385	540	940	5600	550
PWC 60														
PWC 63														
PWC 67														

d ₁ , d ₂	75...85	≥ 100
Tapped centre holes in shaft ends DIN 332 Form DS	M 20	M 24

Keys to DIN 6885/1 supplied by ELECON

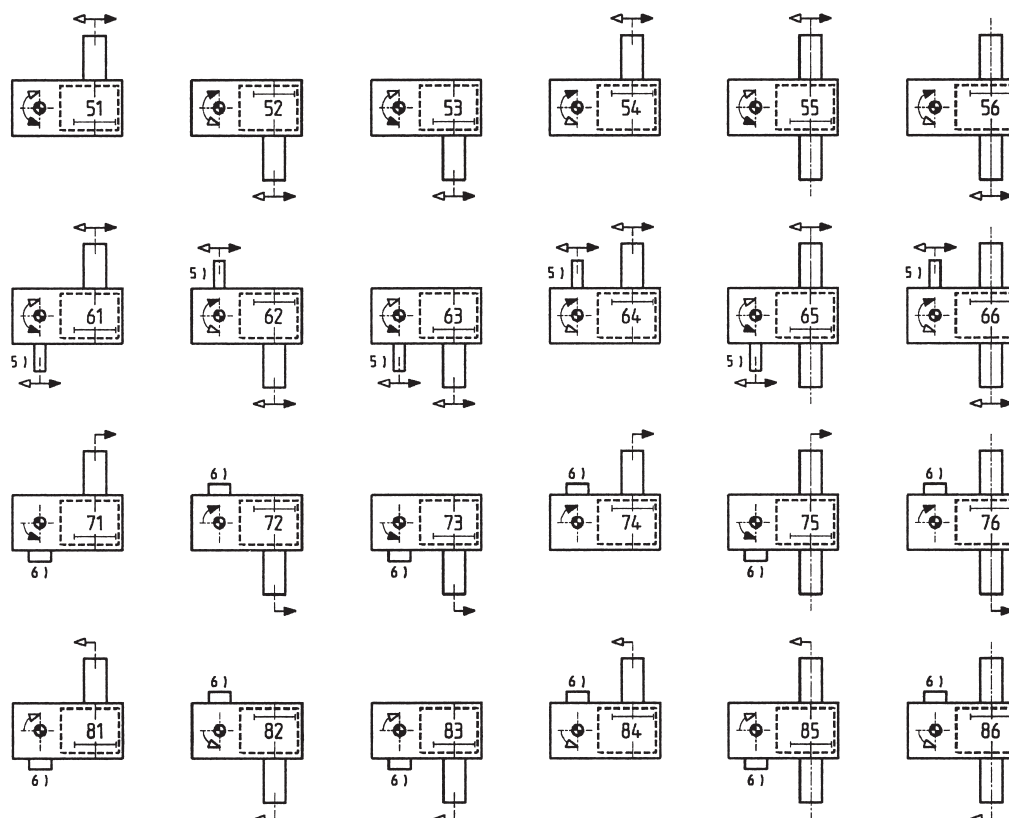
Type of protection as per IP 55

Type	a	b ₆ -0.2	c ₆	Ø d _{H9}	e ₅	e ₆	f ₆	g	g ₆	h -0.2	n _c	n ₆	o	p	p ₂	p ₆	Fitting Ø d _{H9} d _{sX} l _{max} 3)	w _{1U}	
PWC 35	570	225	55	40	970	345	578	925	305	300	1346	345	255	610	262	510	40	M36x330	229
PWC 40	647	225	55	40	1047	423	728	1002	382	375	1501	423	330	760	262	510	40	M36x330	154
PWC 42	693	265	62	45	1193	422	680	1134	372	355	1652	422	305	720	303	590	45	M42x400	277
PWC 45	759	265	62	45	1259	490	820	1200	440	425	1786	490	375	860	303	590	45	M42x400	207
PWC 47	845	265	62	52	1345	575	970	1285	525	500	1957	575	440	1010	303	590	52	M48x400	142
PWC 50	857	320	75	60	1457	505	820	1392	450	425	1962	505	360	910	358	710	60	M56x400	360
PWC 53	928	320	75	60	1528	580	970	1463	525	500	2108	580	435	1060	358	710	60	M56x400	285
PWC 56	1021	320	75	60	1621	680	1170	1556	625	600	2301	680	535	1260	365	715	60	M56x400	185
PWC 60																			
PWC 63																			
PWC 67																			

- 1) Dimensions of hollow shaft and machine shaft on request
- 2) Torque arms see dimensions 900-0253-MB1
- 3) Holding down bolts of min. property class 10.9
- 4) Available for shaft d₁ : n ≥ 1000 min⁻¹, lower speed on request

Location of input and output shafts

Directions of rotation viewing ↷

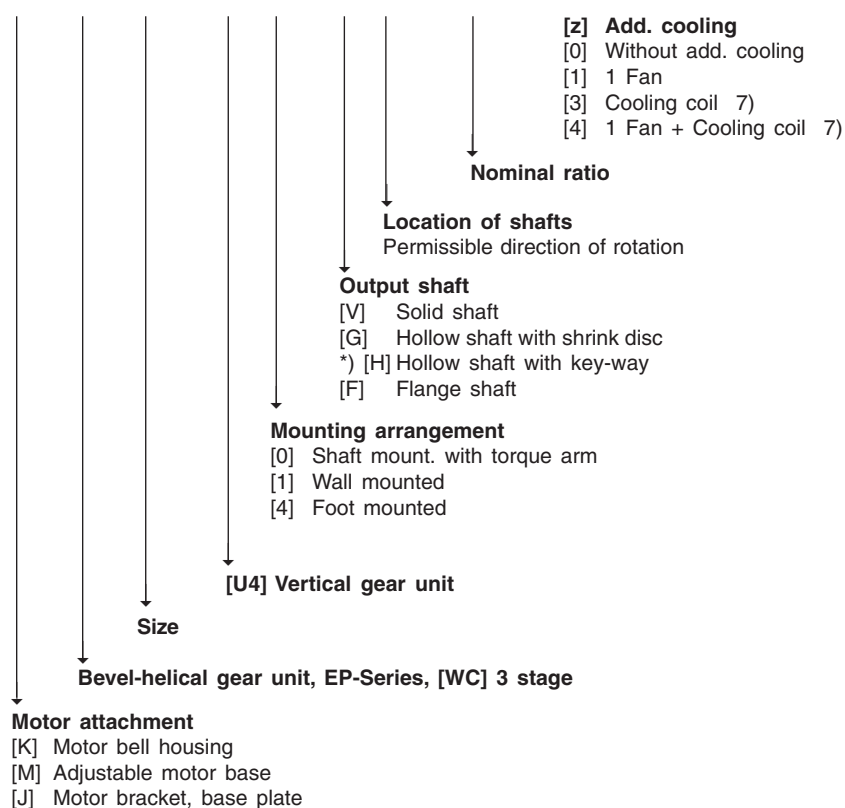


5) Add. shaft extension

6) Backstop, see 900-1254-MB1

K	PWC	35	-	U4	4	-	V	51	-	25	-	Z	3
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Example



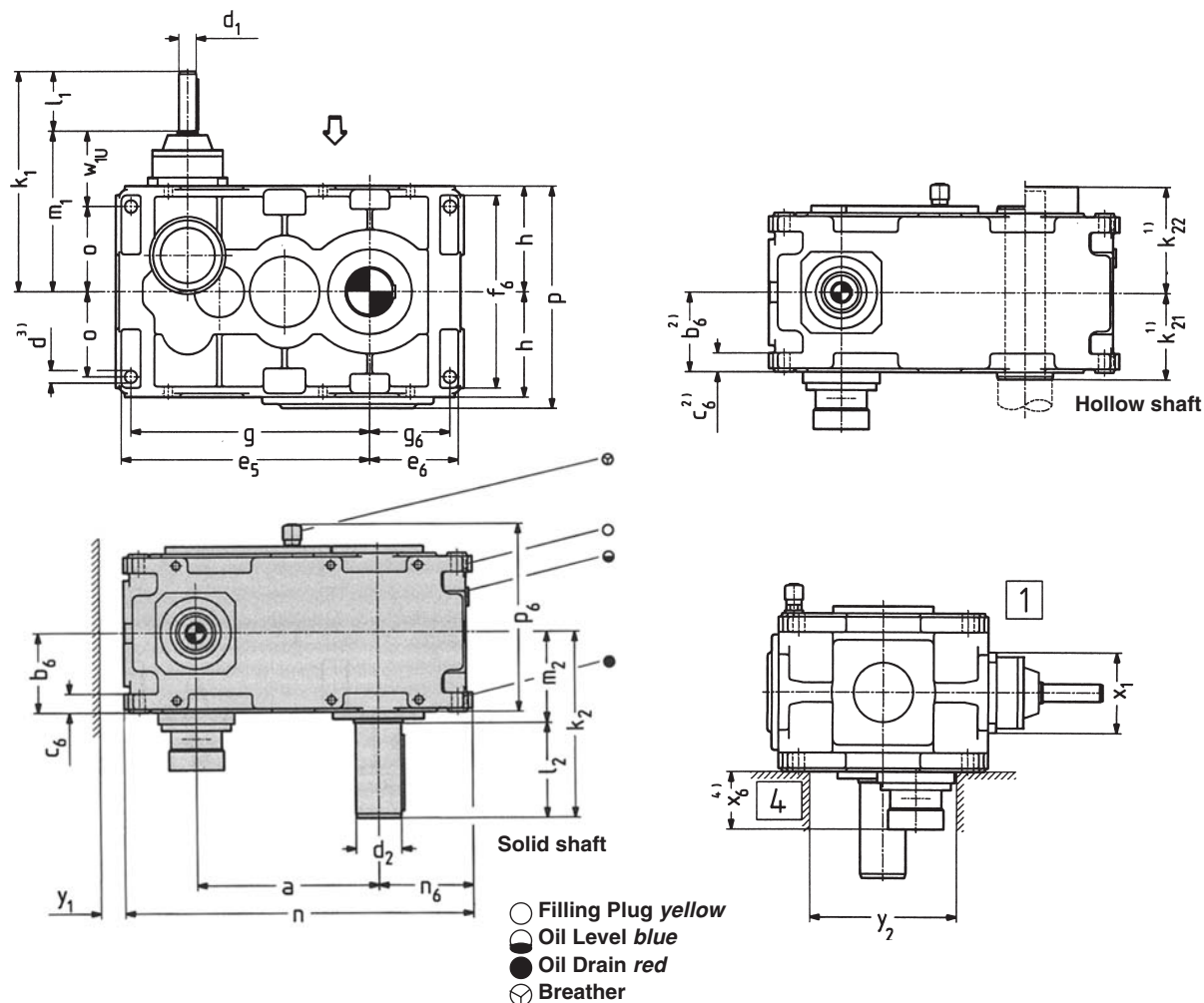
7) Only location of shafts : .2, .4 and .6

*) Only types PWC35 and PWC40

Dimensions

Type PWD 14-U4 ... PWD 31-U4

Add. lubrication required, please check-back



Type	Input shaft						Output shaft						Weight [kg]	Oil filling [l]
	Ø d1 k6	k1	l1	m1	Ø x1	y1	Ø d2 m6	k2	l2	m2	Ø x2	y2		
PWD 14	20	319	80	239	132	100	65	270	135	135	-	210	115	11
PWD 16	20	319	80	239	132	100	85	290	145	145	-	270	180	16
PWD 18	25	378	85	293	148	100	95	350	170	180	-	270	255	25
PWD 20	25	387	85	302	148	100	120	370	190	180	-	340	345	34
PWD 22	40	497	120	377	190	100	130	405	190	215	-	330	475	49
PWD 25	40	482	120	362	190	100	145	450	230	220	-	390	610	53
PWD 28	40	497	120	377	190	100	160	480	230	250	-	400	780	83
PWD 31	40	497	120	377	190	100	175	540	290	250	-	470	1070	95

Tapped centre holes in shaft ends DIN 332 Form DS				
d1, d2				
20	25	40	65...85	> 85
M 6	M 10	M 16	M 20	M 24

Keys to DIN 6885/1 supplied by ELECON

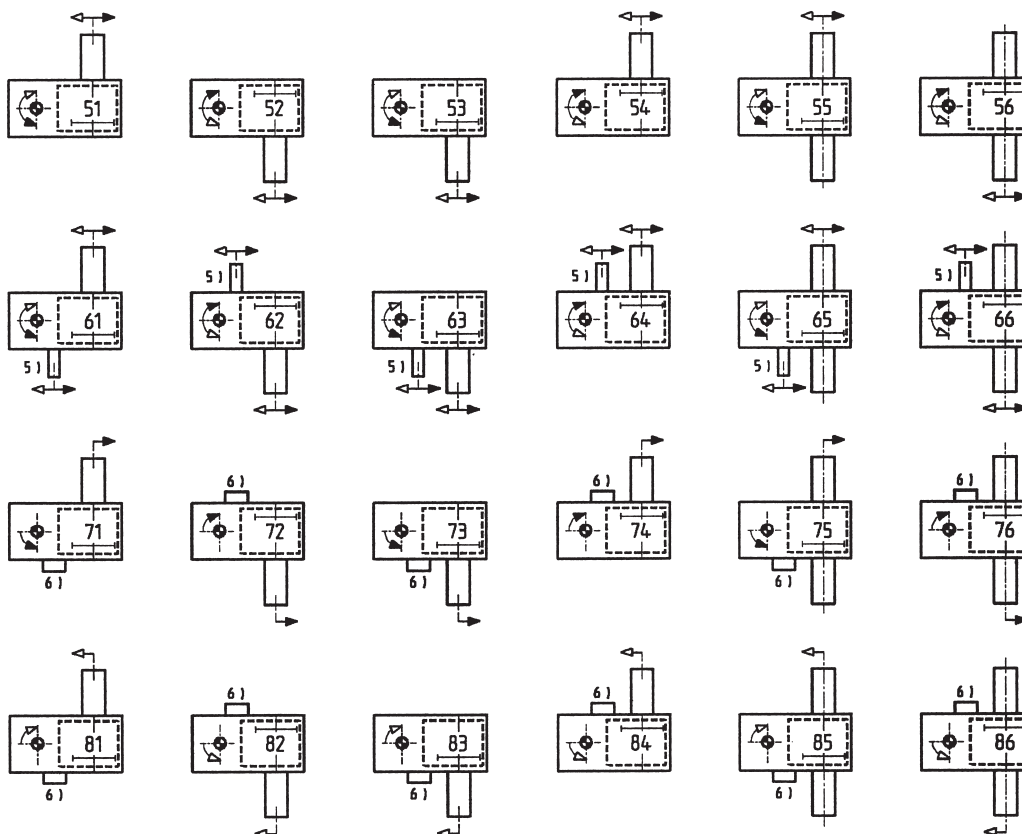
Type of protection as per IP 55

Type	a	b6 -0.2	c6	Ø d H9	e5	e6	f6	g	g6	h -0.2	n	n6	o	p	p2	p6	Fitting		W1U	X6
																	Ø d H9	dsx lmax 3)		
PWD 14	262	113	27	16	357	126	274	344	113	150	500	134	121	333	-	270	16	M14x65	118	130
PWD 16	318	113	27	16	413	175	334	400	162	180	605	183	151	393	-	270	16	M14x65	88	130
PWD 18	366	147	32	22	475	162	348	458	145	190	654	171	155	419	-	340	22	M20x80	138	130
PWD 20	410	147	32	22	528	218	418	511	201	225	764	227	190	489	-	340	22	M20x80	112	130
PWD 22	464	179	41	26	600	200	426	580	180	235	826	215	190	513	-	416	26	M24x100	187	130
PWD 25	535	179	41	26	658	256	486	638	236	265	940	271	220	573	204	416	26	M24x100	142	130
PWD 28	585	210	48	33	731	245	508	706	221	280	1000	256	227	610	246	480	33	M30x120	150	130
PWD 31	653	210	48	33	798	307	578	773	282	315	1137	325	262	680	239	480	33	M30x120	115	130

- 1) Dimensions of hollow shaft and machine shaft on request
- 2) Torque arms see dimensions 900-0253-MB1
- 3) Holding down bolts of min. property class 10.9
- 4) Available for shaft d1: n ≥ 1000 min⁻¹, lower speed on request

Location of input and output shafts

Directions of rotation viewing ↗

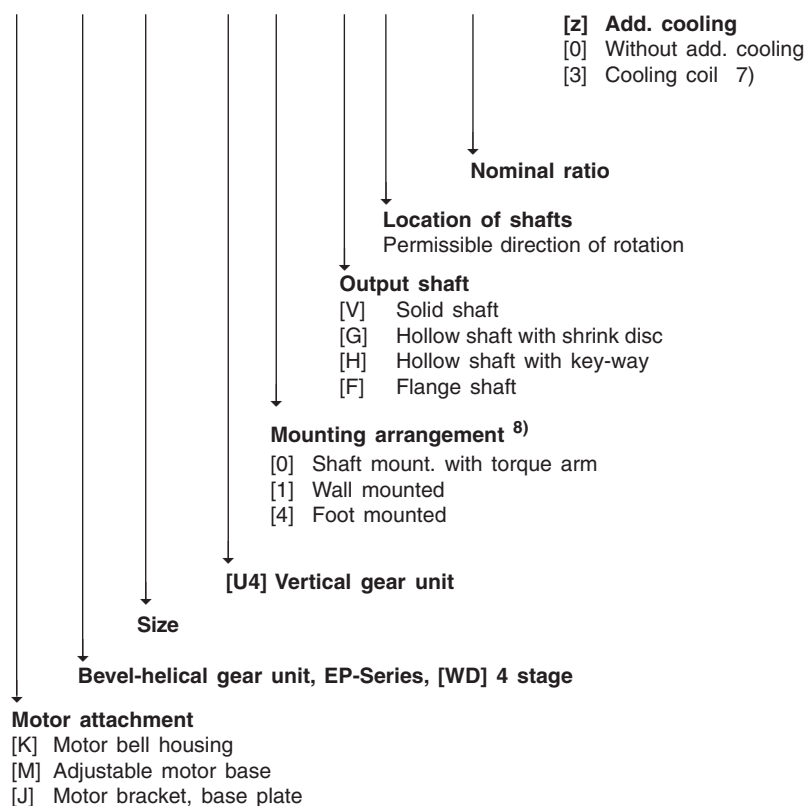


5) Add. shaft extension (900-1200-...)

6) Backstop, see 900-1254-MB1

K	PWD	22	-	U4	4	-	V	51	-	250	-	Z	3
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Example



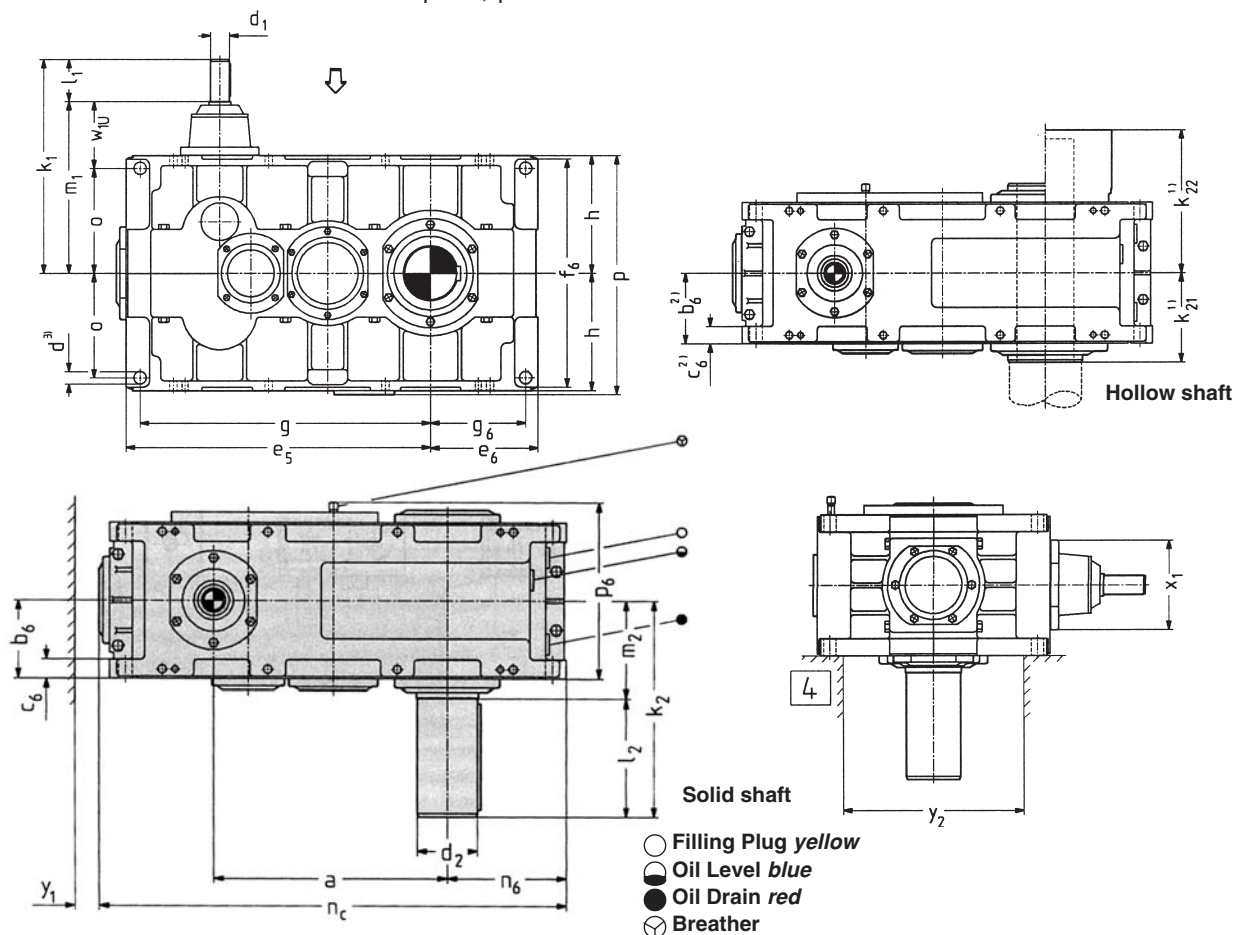
7) Only location of shafts : .2, .4 and .6

8) See dimension sheet 900-0220-MB9

Dimensions

Type PWD 35-U4 ... PWD 67-U4

Add. lubrication required, please check-back



Type	Input shaft						Output shaft						Weight [kg]	Oil filling [l]
	Ø d ₁ m6	k ₁	l ₁	m ₁	Ø x ₁	y ₁	Ø d ₂ m6	k ₂	l ₂	m ₂	Ø x ₂	y ₂		
PWD 35	50 k6	517	120	397	285	100	155	570	290	280	328	440	1530	100
PWD 40	50 k6	593	120	473	285	100	175	570	290	280	348	590	1860	135
PWD 42	60	662	145	517	265	100	195	650	330	320	400	530	2230	170
PWD 45	60	666	145	521	265	100	210	730	410	320	440	670	2780	240
PWD 47	60	707	145	562	265	100	230	730	410	320	440	780	3330	325
PWD 50	75	769	160	609	285	100	250	795	410	385	480	590	4300	290
PWD 53	75	769	160	609	285	100	250	795	410	385	480	740	4900	400
PWD 56	75	844	160	684	285	100	270	845	460	385	540	940	5600	550
PWD 60														
PWD 63														
PWD 67														

d ₁ , d ₂	50	60...85	≥ 155
Tapped centre holes in shaft ends DIN 332 Form DS	M 16	M 20	M 24

Keys to DIN 6885/1 supplied by ELECON

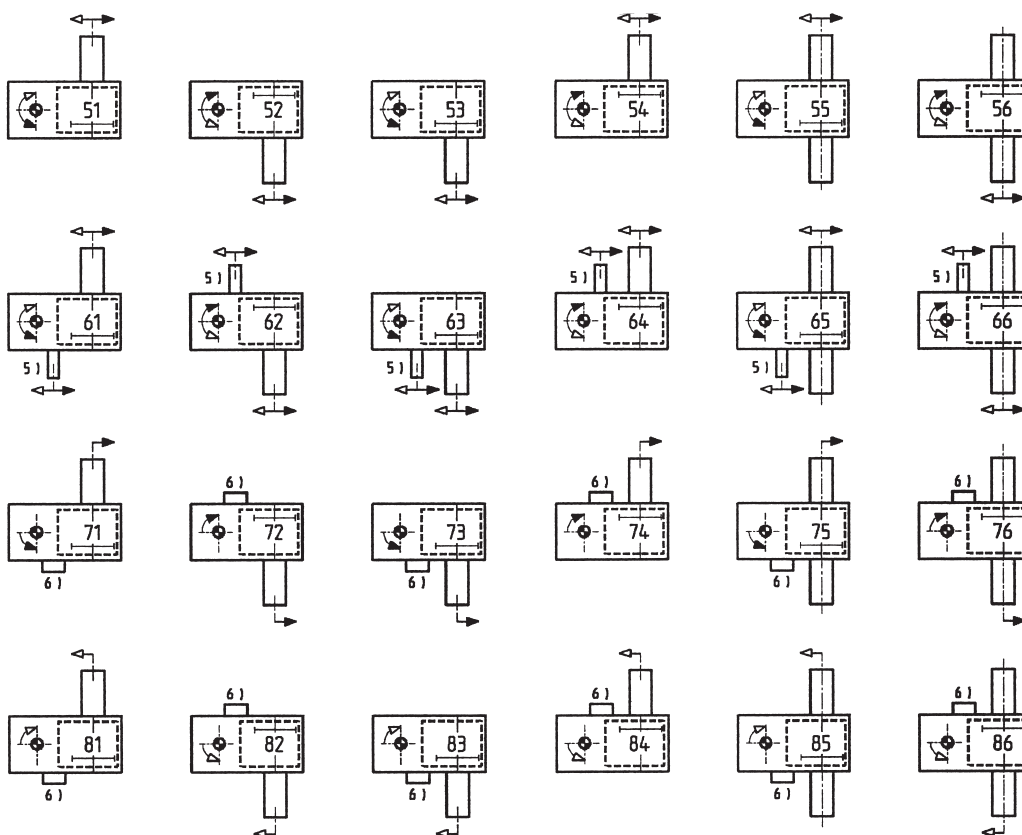
Type of protection as per IP 55

Type	a	b ₆ -0.2	c ₆	Ø d _{H9}	e ₅	e ₆	f ₆	g	g ₆	h -0.2	n _c	n ₆	o	p	p ₂	p ₆	Fitting		W _{1U}
																	Ø d _{H9}	dsx l _{max}	
PWD 35	726	225	55	40	970	345	578	925	305	300	1346	345	255	610	262	510	40	M36x330	142
PWD 40	736	225	55	40	1047	423	728	1002	382	375	1501	423	330	760	262	510	40	M36x330	143
PWD 42	837	265	62	45	1193	422	680	1134	372	355	1652	422	305	720	303	590	45	M42x400	212
PWD 45	899	265	62	45	1259	490	820	1200	440	425	1786	490	375	860	303	590	45	M42x400	146
PWD 47	924	265	62	52	1345	575	970	1285	525	500	1957	575	440	1010	303	590	52	M48x400	122
PWD 50	1070	320	75	60	1457	505	820	1392	450	425	1962	505	360	910	358	710	60	M56x400	249
PWD 53	1141	320	75	60	1528	580	970	1463	525	500	2108	580	435	1060	358	710	60	M56x400	174
PWD 56	1166	320	75	60	1621	680	1170	1556	625	600	2301	680	535	1260	365	715	60	M56x400	149
PWD 60																			
PWD 63																			
PWD 67																			

- 1) Hollow shaft and machine shaft see dimensions 900-0212-MB 1 and 900-0213-MB1
- 2) Torque arms see dimensions 900-0253-MB1

Location of input and output shafts

Directions of rotation viewing ↷

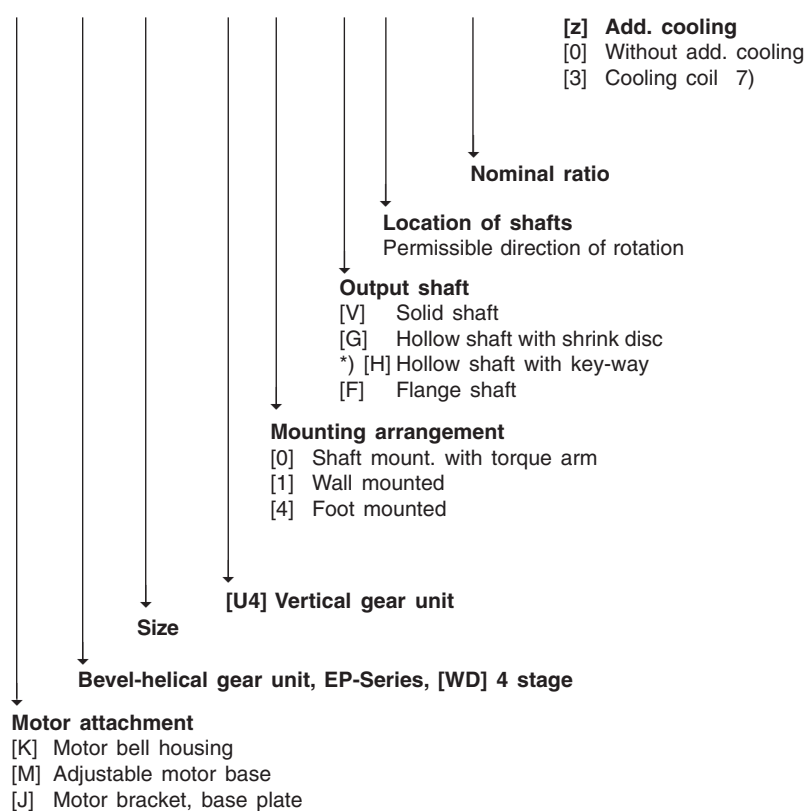


5) Add. shaft extension

6) Backstop, see 900-1254-MB1

K PWD 35 - U4 4 - V 51 - 250 - Z 3

Example



7) Only location of shafts : .2, .4 and .6

*) Only types PWD35 and PWD40

Exact ratios

Helical Gear Units, one-stage Type PB

iN	Gearbox Size							
	10	12	16	20	25	31	40	45
1.25	1.25	1.26	1.26	1.26	1.27	1.25		
1.4	1.40	1.41	1.41	1.41	1.43	1.40		
1.6	1.57	1.59	1.59	1.59	1.62	1.57		
1.8	1.77	1.80	1.80	1.80	1.83	1.77		
2	2.00	2.00	2.00	2.00	2.00	2.00		
2.24	2.27	2.29	2.29	2.29	2.29	2.27		
2.5	2.48	2.50	2.50	2.50	2.45	2.48		
2.8	2.79	2.83	2.83	2.83	2.78	2.79		
3.15	3.18	3.12	3.12	3.12	3.19	3.18		
3.55	3.50	3.60	3.60	3.60	3.47	3.50		
4	4.07	4.00	4.00	4.00	4.08	4.07	4.07	4.07
4.5	4.54	4.46	4.46	4.46	4.58	4.54	4.54	4.54
5	5.07	5.06	5.00	5.07	5.07	4.94	5.00	5.07
5.6	5.57	5.60	5.50	5.69	5.69	5.63	5.50	5.69

Helical Gear Units, two-stage Type PC

iN	Gearbox Size																		
	14	16	18	20	22	25	28	31	35	40	42	45	47	50	53	56	60	63	67
4	3.98		4.00		3.95		4.03		3.97		3.92								
4.5	4.46		4.49		4.44		4.52		4.48		4.39								
5	5.01		5.06		5.01		5.10		5.06	5.24	4.92	4.83							
5.6	5.64		5.72	5.77	5.66	5.39	5.76	5.45	5.74	5.90	5.54	5.41							
6.3	6.38	6.48	6.35	6.49	6.29	6.06	6.40	6.13	6.27	6.68	6.27	6.08	6.00						
7.1	7.24	7.26	7.26	7.31	7.18	6.83	7.31	6.90	7.16	7.58	7.12	6.84	6.72						
8	7.89	8.15	7.94	8.26	7.86	7.71	8.00	7.80	7.68	8.27	7.76	7.73	7.54						
9	8.89	9.18	9.00	9.18	8.91	8.57	9.07	8.67	8.70	9.45	8.74	8.79	8.49						
10	10.1	10.4	9.90	10.5	9.80	9.80	9.98	9.90	9.99	10.1	9.95	9.58	9.60						
11.2	11.2	11.8	11.4	11.5	11.3	10.7	11.5	10.8	10.9	11.5	11.0	10.8	10.9						
12.5	13.0	12.9	12.7	13.0	12.6	12.1	12.8	12.3	12.8	13.2	12.8	12.3	11.9	12.7					
14	14.5	14.5	14.2	14.3	14.0	13.4	14.3	13.5	14.4	14.3	14.2	13.5	13.4	14.2	15.3				
16	16.2	16.5	16.1	16.5	15.7	15.4	16.2	15.6	15.9	16.9	15.5	15.7	15.3	15.6	17.0	18.6			
18	17.8	18.2	17.8	18.4	17.3	17.1	18.2	17.3	17.8	18.9	17.6	17.6	16.8	17.2	18.8	20.7			
20		21.1		20.5		19.1		19.3		21.0		19.1	19.5		20.6	22.8			
22.4		23.5		23.2		21.4		22.0		23.5		21.8	21.8			25.1			
25		26.3		25.7		23.6		24.7					23.7						
28		28.9											27.0						

iN = Nominal ratio

Exact ratios

Helical Gear Units, three-stage

Type PD

iN	Gearbox Size																		
	14	16	18	20	22	25	28	31	35	40	42	45	47	50	53	56	60	63	67
16			15.9				16.1		16.1		16.1			16.1			16.0		
18			17.7				18.0		18.1		17.9			18.0			17.8	18.7	
20	20.8		20.1		19.6		20.4		20.0	21.2	19.5	19.8		19.8	19.3		19.9	20.8	21.4
22.4	23.2		22.5	22.9	21.9		23.0	21.8	23.0	23.8	23.0	22.1		23.3	21.6	23.5	22.6	23.2	23.8
25	25.8		25.1	25.6	24.5	26.7	25.7	24.3	25.9	26.4	25.6	24.1	24.6	26.0	23.8	26.2	25.2	26.4	26.6
28	28.4		28.5	29.0	27.0	29.8	29.2	27.7	28.6	30.3	27.9	28.3	27.4	28.7	28.0	28.9	28.1	29.4	30.3
31.5	32.1	33.8	31.5	32.5	31.4	33.4	32.8	31.2	32.1	34.1	31.7	31.6	29.9	31.5	31.2	34.1	31.6	32.9	33.7
35.5	35.8	37.7	35.1	36.2	35.1	36.8	35.7	34.8	35.9	37.7	35.6	34.4	35.2	34.8	34.4	38.0	35.2	36.9	37.7
40	40.0	42.1	39.8	41.1	39.3	42.9	40.6	39.6	39.7	42.4	38.7	39.2	39.2	38.3	37.8	41.8	39.4	41.2	42.3
45	43.9	46.2	44.0	45.5	43.2	47.8	45.5	44.4	44.6	47.4	44.1	43.9	42.7	42.1	41.7	46.0	44.2	46.1	47.2
50	51.9	52.3	51.7	50.7	49.3	53.6	51.2	48.3	51.1	52.4	51.0	47.8	48.6	51.9	45.9	50.7	51.9	51.7	52.7
56	57.9	58.2	57.7	57.5	55.0	58.9	57.1	54.9	57.4	58.8	56.9	54.4	54.5	57.8	50.5	55.9	57.9	60.8	59.2
63	64.6	65.0	65.5	63.6	61.7	67.3	64.9	61.7	63.6	67.4	62.0	63.0	59.3	63.7	62.3	61.5	64.7	67.8	69.6
71	71.0	71.5	72.4	74.7	67.8	75.0	72.9	69.3	71.3	75.8	70.5	70.2	67.5	70.1	69.4	75.7	72.6	75.7	77.6
80		84.5	79.0	83.3		84.1	80.0	77.3	79.0	83.9	80.9	76.5	78.2	80.7	76.4	84.4	80.0	85.0	86.7
90		94.2	89.6	94.6		92.5	90.9	87.9	87.4	94.1	88.2	87.0	87.1	88.9	84.1	93.0	89.4	93.6	97.3
100		105	99.1	105			102	98.7	98.1	104	100	99.9	94.9	97.8	96.9	102	100	105	107
112		116		114				108		115		109	108		107	118		117	120
125				129				123		129		124	124		117	130			135
140				143				138					135			143			
160													154						

Helical Gear Units, four-stage

Type PE

iN	Gearbox Size																		
	14	16	18	20	22	25	28	31	35	40	42	45	47	50	53	56	60	63	67
71					67.6		72.6		72.8		71.6			73.4			72.8		
80					75.4		81.0		81.8		79.8			81.8			81.2	85.2	
90			93.3		84.6	92.2	92.1		90.6		87.0	88.4		90.1	88.0		90.7	95.0	
100			104		95.7	103	103	98.3	104	96.0	102	98.5		105	98.1	107	104	106	97.6
112			118		107	115	115	110	117	108	114	107	110	117	108	119	116	122	109
125			131	135	120	131	130	125	130	119	124	126	122	129	126	132	130	136	122
140			144	150	132	146	146	139	145	137	142	141	133	142	140	153	146	152	140
160			161	171	150	163	160	155	163	155	158	154	157	163	155	171	161	171	156
180			183	189	168	180	182	176	180	171	173	175	175	179	170	188	180	189	174
200			202	208	184	204	205	198	202	192	197	196	191	197	195	207	202	211	195
224			233	232	220	228	237	217	231	215	228	213	217	233	215	237	232	237	216
250			260	264	246	251	264	247	260	237	254	243	243	260	236	261	258	271	242
280			295	292	275	300	300	277	288	266	277	281	265	286	280	288	288	302	271
315			327	337	303	335	337	320	323	305	315	313	301	315	312	341	324	338	310
355				376	336	376	361	357	364	343	355	341	349	358	344	380	367	379	346
400				426	377	413	410	406	403	380	387	388	389	394	378	418	411	430	387
450				472	415	459	461	456	452	426	440	438	424	433	429	460	461	480	434
500						514		489		481		478	482		473	522		539	492
560						565		556		532		543	544		520	575			550
630								624		597			593			633			618
710													675						

iN = Nominal ratio

Exact ratios

Bevel-Helical Gear Units, two-stage

Type **PLB**

i _N	Gearbox Size							
	10	12	16	20	25	31	40	45
5.6	5.67	5.57	5.57	5.57	5.68	5.67	5.67	5.67
6.3	6.32	6.21	6.21	6.21	6.38	6.32	6.32	6.32
7.1	7.06	7.05	6.96	7.06	7.06	6.89	6.96	7.06
8	8.14	8.00	8.00	8.00	8.15	8.14	8.14	8.14
9	9.08	8.92	8.92	8.92	9.17	9.08	9.08	9.08
10	10.1	10.1	10.0	10.1	10.1	9.89	10.0	10.1
11.2	11.3	11.1	11.1	11.1	11.4	11.3	11.3	11.3
12.5	12.6	12.4	12.4	12.4	12.8	12.6	12.6	12.6
14	14.1	14.1	13.9	14.1	14.1	13.8	13.9	14.1
16	16.3	16.0	16.0	16.0	16.3	16.3	16.3	16.3
18	18.2	17.9	17.9	17.9	18.3	18.2	18.2	18.2
20	20.3	20.3	20.0	20.3	20.3	19.8	20.0	20.3
22.4	22.3	22.4	22.0	22.8	22.8	22.5	22.0	22.8

Bevel-Helical Gear Units, three-stage

Type **PLC**

in	Gearbox Size																		
	14	16	18	20	22	25	28	31	35	40	42	45	47	50	53	56	60	63	67
18	18.1		17.7		17.5		17.8		17.8		17.8			17.7			17.8		
20	20.2		19.7		19.5		19.9		20.0		19.8			19.8			19.8	20.8	
22.4	22.5		22.4		21.9	23.9	22.6		22.1	23.5	21.6	21.9		21.8	21.3		22.1	23.2	23.8
25	26.0		25.4	25.6	25.1	26.6	25.6	24.1	25.6	26.4	25.5	24.4		25.5	23.7	25.9	25.5	25.9	26.6
28	28.9	29.4	28.3	28.5	28.0	29.9	28.6	26.9	28.7	29.2	28.4	26.6	27.2	28.4	26.1	28.8	28.4	29.9	29.7
31.5	32.3	32.8	32.2	32.4	31.4	34.3	32.5	30.6	31.8	33.7	31.0	31.5	30.3	31.3	30.5	31.8	31.8	33.3	34.2
35.5	36.2	36.6	35.4	36.7	35.0	38.2	35.7	34.7	35.6	37.9	35.5	35.1	33.1	35.4	34.0	37.2	35.5	37.2	38.1
40	40.3	42.2	39.5	40.9	39.1	42.9	39.8	38.7	40.0	41.9	39.6	38.2	39.1	39.5	37.5	41.4	39.6	41.6	42.6
45	45.0	47.1	44.8	46.5	43.8	47.8	45.2	44.0	44.3	46.9	43.2	43.9	43.6	43.5	42.5	45.6	44.3	46.4	47.6
50	51.9	52.6	50.8	51.1	50.3	53.3	51.2	48.3	51.1	52.8	51.0	48.9	47.5	50.9	47.4	51.8	51.0	51.8	53.1
56	57.9	58.8	56.7	57.0	56.1	59.7	57.1	53.9	57.4	58.4	56.9	53.3	54.4	56.7	52.2	57.7	56.9	59.7	59.3
63	64.6	65.6	64.3	64.7	62.9	68.6	64.9	61.2	63.6	67.4	62.0	63.0	60.7	62.5	61.1	63.6	63.6	66.6	68.4
71	71.0	73.2	71.2	73.4	69.1	76.5	72.9	69.3	71.3	75.8	70.5	70.2	65.7	68.8	68.1	74.3	71.3	74.4	76.3
80		84.5		81.9		85.7		77.3		83.9		76.5	78.2		75.0	82.8		83.5	85.2
90		94.2		92.9		94.3		87.9		94.1		87.0	87.1		82.5	91.3			95.6
100		105		103				98.7					94.9			100			
112		116											108						

i_N = Nominal ratio

Exact ratios

Bevel-Helical Gear Units, four-stage
Type **PLD**

i _N	Gearbox Size																		
	14	16	18	20	22	25	28	31	35	40	42	45	47	50	53	56	60	63	67
71	72.3																		
80	80.6		81.2		75.4		80.8		80.6		79.3			81.2			80.6		
90	90.0		90.6		84.1		90.2		90.6		88.4			90.5			89.9	94.4	
100	104		103		94.3	103	103		100	106	96.3	97.8		99.8	97.5		100	105	108
112	116	118	117	117	108	115	116	109	116	120	114	109		117	109	119	116	118	120
125	129	131	130	131	121	129	129	122	130	132	127	119	121	130	120	132	129	136	135
140	145	146	148	148	135	148	147	139	144	153	138	141	135	143	140	146	144	151	155
160	161	169	162	168	151	165	162	157	161	172	159	157	148	162	156	170	161	169	173
180	180	188	181	188	168	185	180	175	181	190	177	171	174	181	172	190	180	189	193
200	208	210	206	213	189	206	205	199	201	213	193	196	194	200	195	209	201	210	216
224	232	235	233	235	217	230	232	219	231	239	228	218	212	233	217	237	232	235	241
250	258	262	260	262	242	257	259	244	260	265	254	238	243	260	239	264	258	271	269
280	284	293	295	297	271	295	294	278	288	305	277	281	271	286	280	291	288	302	310
315		338	327	337	298	330	330	314	323	343	315	313	295	315	312	341	324	338	346
355		377		376		369		351		380		341	349		344	380		379	387
400		421		426		406		399		426		388	389		378	418			434
450		462		472				447					424			460			
500													482						

Exact ratios

Compact Drive (Bevel-Helical), three-stage Type PWC

i _N	Gearbox Size																		
	14	16	18	20	22	25	28	31	35	40	42	45	47	50	53	56	60	63	67
25	26.0		25.4		25.1		25.6		25.6		25.5			25.5			25.5		
28	28.9		28.3		28.0		28.6		28.7		28.4			28.4			28.4	29.9	
31.5	32.3		32.2		31.4	34.3	32.5		31.8	33.7	31.0	31.5		31.3	30.5		31.8	33.3	34.2
35.5	36.2		35.4	36.7	35.0	38.2	35.7	34.7	35.6	37.9	35.5	35.1		35.4	34.0	37.2	35.5	37.2	38.1
40	40.3	42.2	39.5	40.9	39.1	42.9	39.8	38.7	40.0	41.9	39.6	38.2	39.1	39.5	37.5	41.4	39.6	41.6	42.6
45	45.0	47.1	44.8	46.5	43.8	47.8	45.2	44.0	44.3	46.9	43.2	43.9	43.6	43.5	42.5	45.6	44.3	46.6	47.6
50	51.9	52.6	50.8	51.1	50.3	53.3	51.2	48.3	51.1	52.8	51.0	48.9	47.5	50.9	47.4	51.8	51.0	51.8	53.1
56	57.9	58.8	56.7	57.0	56.1	59.7	57.1	53.9	57.4	58.4	56.9	53.3	54.4	56.7	52.2	57.7	56.9	59.7	59.3
63	64.6	65.6	64.3	64.7	62.9	68.6	64.9	61.2	63.6	67.4	62.0	63.0	60.7	62.5	61.1	63.6	63.6	66.6	68.4
71	71.0	73.2	71.2	73.4	69.1	76.5	72.9	69.3	71.3	75.8	70.5	70.2	65.7	68.8	68.1	74.3	71.3	74.4	76.3
80		84.5		81.9		85.7		77.3		83.9		76.5	78.2		75.0	82.8		83.5	85.2
90		94.2		92.9		94.3		87.9		94.1		87.0	87.1		82.5	91.3			95.6
100		105		103				98.7					94.9			100			
112		116											108						

Compact Drive (Bevel-Helical), four-stage Type PWD

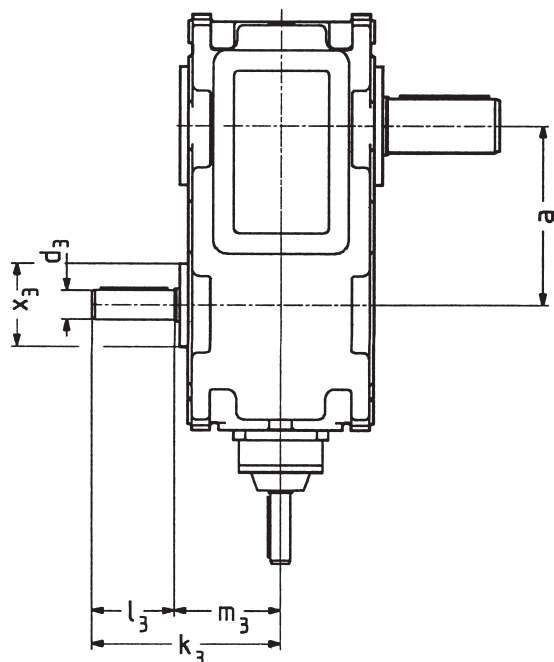
i _N	Gearbox Size																		
	14	16	18	20	22	25	28	31	35	40	42	45	47	50	53	56	60	63	67
71	72.3																		
80	80.6		81.2		75.4		80.8		80.6		79.3			81.2			80.6		
90	90.0		90.6		84.1		90.2		90.6		88.4			90.5			89.9	94.4	
100	104		103		94.3	103	103		100	106	96.3	97.8		99.8	97.5		100	105	108
112	116	118	117	117	108	115	116	109	116	120	114	109		117	109	119	116	118	120
125	129	131	130	131	121	129	129	122	130	132	127	119	121	130	120	132	129	136	135
140	145	146	148	148	135	148	147	139	144	153	138	141	135	143	140	146	144	151	155
160	161	169	162	168	151	165	162	157	161	172	159	157	148	162	156	170	161	169	173
180	180	188	181	188	168	185	180	175	181	190	177	171	174	181	172	190	180	189	193
200	208	210	206	213	189	206	205	199	201	213	193	196	194	200	195	209	201	210	216
224	232	235	233	235	217	230	232	219	231	239	228	218	212	233	217	237	232	235	241
250	258	262	260	262	242	257	259	244	260	265	254	238	243	260	239	264	258	271	269
280	284	293	295	297	271	295	294	278	288	305	277	281	271	286	280	291	288	302	310
315		338	327	337	298	330	330	314	323	343	315	313	295	315	312	341	324	338	346
355		377		376		369		351		380		341	349		344	380		379	387
400		421		426		406		399		426		388	389		378	418			434
450		462		472				447					424			460			
500													482						

i_N = Nominal ratio

Dimensions

Additional shaft for bevel-helical gear units

Type PLB, PLC, PLD

Tapped centre holes in shaft ends
DIN 332 Form DS

$\varnothing d_3$			
35	45	60...70	> 85
M 12	M 16	M 20	M 24

Keys to DIN 6885/1 supplied by ELECON

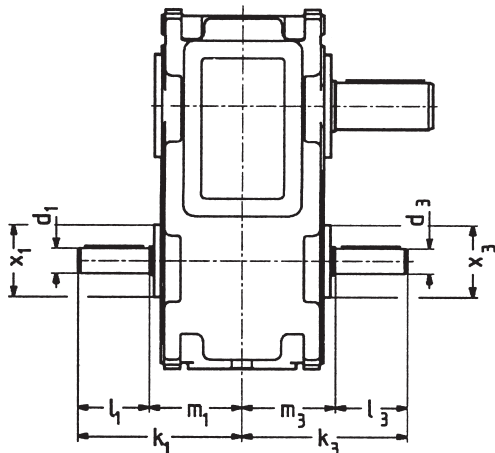
Size	a	$\varnothing d_3$	k ₃	l ₃	m ₃	$\varnothing x_3$
14	216	35 k6	218	100	118	-
16	272					
18	293	45 k6	275	120	155	-
20	347					
22	376	60 m6	337	140	197	195
25	434					
28	464	70 m6	369	140	229	205
31	532					
35	570	90 m6	446	180	266	255
40	647					
42	693	100 m6	537	215	322	328
45	759					
47	845	120 m6	600	215	385	348
50	857					
53	928	150 m6	725	250	475	440
56	1021					
60	1032					
63	1105					
67	1176					
PLB10	94	35 k6	218	100	118	-
PLB12	127	45 k6	275	120	155	-
PLB16	164	60 m6	337	140	197	195
PLB20	201	70 m6	369	140	229	205
PLB25	247	90 m6	446	180	266	255
PLB31	302	100 m6	537	215	322	328
PLB40	374	120 m6	600	215	385	348
PLB45	449	150 m6	725	250	475	440

Dimensions

3.99

Solid through input shafts for helical gear units

Type PC 14-...PC 56-... / PD 14-...PD 25-...



Tapped centre holes in shaft ends DIN 332 Form DS				
Ø d ₁ , d ₃				
25...30	35	40...50	60...85	> 85
M 10	M 12	M 16	M 20	M 24

Keys to DIN 6885/1 supplied by ELECON

Type	Input Shaft										
	i _N	Ø d ₁	k ₁	l ₁	m ₁	Ø x ₁	Ø d ₃	k ₃	l ₃	m ₃	Ø x ₃
PC 14	4...14	35 k6	218	100	118	—	30 k6	218	100	118	—
	16...18						25 k6	200	82		
PC 16	6.3...22.4	35 k6	218	100	118	—	30 k6	218	100	118	—
	25...28						25 k6	200	82		
PC 18	4...14	45 k6	275	120	155	—	45 k6	275	120	155	—
	16...18						30 k6	255	100		
PC 20	5.6...20	45 k6	275	120	155	—	45 k6	275	120	155	—
	22.4...25						30 k6	255	100		
PC 22	4...14	60 m6	337	140	197	195	60 m6	337	140	197	195
	16...18						40 k6	317	120		
PC 25	5.6...20	60 m6	337	140	197	195	60 m6	337	140	197	195
	22.4...25						40 k6	317	120		
PC 28	4...14	70 m6	369	140	229	205	70 m6	369	140	229	205
	16...18						50 k6	349	120		
PC 31	5.6...20	70 m6	369	140	229	205	70 m6	369	140	229	205
	22.4...25						50 k6	349	120		
PC 35	4...14	90 m6	446	180	266	255	85 m6	446	180	266	255
	16...18						60 m6	406	140		
PC 40	5...18	90 m6	446	180	266	255	85 m6	446	180	266	255
	20...22.4						60 m6	406	140		
PC 42	4...14	100 m6	537	215	322	328	100 m6	537	215	322	328
	16...18						80 m6	492	170		
PC 45	5...18	100 m6	537	215	322	328	100 m6	537	215	322	328
	20...22.4						80 m6	492	170		
PC 47	6.3...22.4	100 m6	537	215	322	328	100 m6	537	215	322	328
	25...28						80 m6	492	170		
PC 50	12.5; 14	120 m6	600	215	385	348	120 m6	600	215	385	348
	16; 18						95 m6	565	180		
PC 53	14; 16	120 m6	600	215	385	348	120 m6	600	215	385	348
	18; 20						95 m6	565	180		
PC 56	18; 20	120 m6	600	215	385	348	120 m6	600	215	385	348
	22.4; 25						95 m6	565	180		
PD 14	20...71	25 k6	203	82	121	—	25 k6	203	82	121	—
PD 16	31.5...112										
PD 18	16...45	35 k6	283	100	183	—	35 k6	283	100	183	—
	50...100	30 k6					30 k6				
PD 20	22.4...63	35 k6	283	100	183	—	35 k6	283	100	183	—
	71...140	30 k6					30 k6				
PD 22	20...45	50 k6	347	120	227	130	50 k6	320	120	200	130
	50...71	40 k6					40 k6				
PD 25	25...56	50 k6	347	120	227	130	50 k6	320	120	200	130
	63...90	40 k6					40 k6				

Dimensions

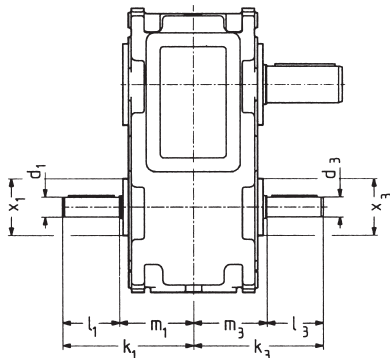
3.99

Solid through input shafts for helical gear units

Type

PD 28-...PD 67-...

PE 18-...PE 67-...



Tapped centre holes in shaft ends DIN 332 Form DS				
Ø d ₁ , d ₃				
25...30	35	40...50	60...85	> 85
M 10	M 12	M 16	M 20	M 24

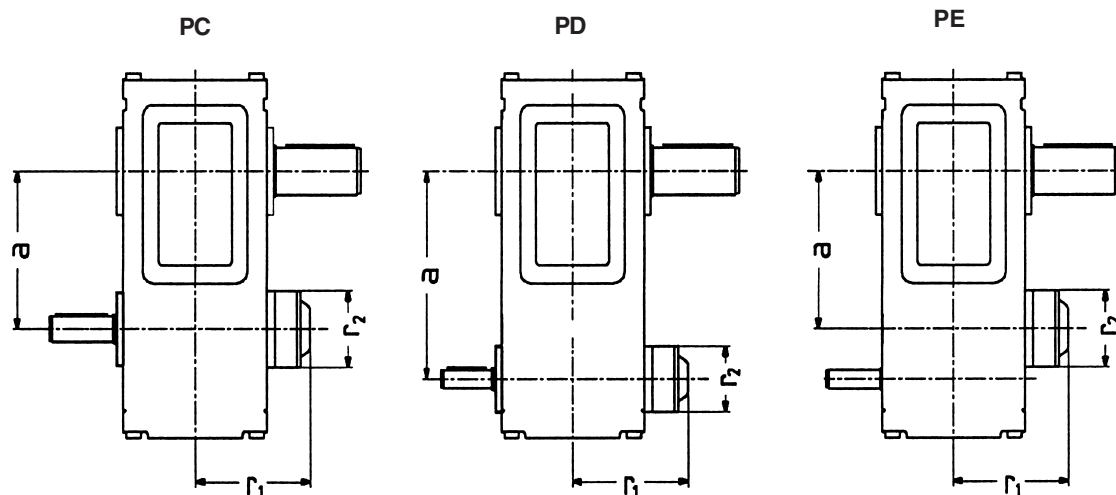
Keys to DIN 6885/1 supplied by ELECON

Type	Input Shaft											
	i _N	Ø d ₁	k ₁	l ₁	m ₁	Ø x ₁	Ø d ₃	k ₃	l ₃	m ₃	Ø x ₃	
PD 28	16...45	50 k6	362	120	242	-	50 k6	362	120	242	-	
	50...100	40 k6					40 k6					
PD 31	22.4...63	50 k6	362	120	242		50 k6	362	120	242	-	
	71...140	40 k6					40 k6					
PD 35	16...45	70 m6	435	145	290		70 m6	435	145	290	205	
	50...100	50 k6	415	125			50 k6	415	125			
PD 40	20...56	70 m6	435	145	290		70 m6	435	145	290	205	
	63...125	50 k6	415	125			50 k6	415	125			
PD 42	16...45	80 m6	508	170	338		80 m6	508	170	338	245	
	50...100	65 m6	483	145			65 m6	483	145			
PD 45	20...56	80 m6	508	170	338		80 m6	508	170	338		
	63...125	65 m6	483	145			65 m6	483	145			
PD 47	25...71	80 m6	508	170	338		80 m6	508	170	338		
	80...160	65 m6	483	145			65 m6	483	145			
PD 50	16...45	100 m6	595	215	380	290	100 m6	595	215	380	290	
	50...100	100 m6	595	215			75 m6	540	160			
PD 53	20...56	100 m6	595	215	380		100 m6	595	215	380		
	63...125	100 m6	595	215			75 m6	540	160			
PD 56	22.4...63	100 m6	595	215	380		100 m6	595	215	380		
	71...140	100 m6	595	215			75 m6	540	160			
PD 60	16...45	130 m6	715	250	465	390	130 m6	715	250	465	390	
	50...100	130 m6	715	250			100 m6	680	215			
PD 63	18...50	130 m6	715	250	465		130 m6	715	250	465		
	56...112	130 m6	715	250			100 m6	680	215			
PD 67	20...56	130 m6	715	250	465		130 m6	715	250	465		
	63...125	130 m6	715	250			100 m6	680	215			
PE 18	90...315	25 k6	227	72	155	-	25 k6	227	72	155	-	
PE 20	125...450											
PE 22	71...200	35 k6	307	100	207		35 k6	307	100	207		
	224...450	30 k6					30 k6					
PE 25	90...250	35 k6	307	100	207		35 k6	307	100	207		
	280...560	30 k6					30 k6					
PE 28	71...450	35 k6	319	100	219		35 k6	319	100	219		
PE 31	100...630											
PE 35	71...200	50 k6	380	120	260		50 k6	380	120	260		
	224...450	40 k6					40 k6					
PE 40	100...280	50 k6	380	120	260		50 k6	380	120	260		
	315...630	40 k6					40 k6					
PE 42	71...450	45 k6	412	107	305		45 k6	412	107	305		
PE 45	90...560											
PE 47	112...710	70 m6	510	145	365		70 m6	510	145	365		
PE 50	71...450											
PE 53	90...560	80 m6	610	170	440		80 m6	610	170	440		
PE 56	100...630											
PE 60	71...450	80 m6	610	170	440		80 m6	610	170	440		
PE 63	80...500											
PE 67	100...630											

Dimensions

Backstop devices for helical gear units

Type



Type	i_N	r_1	$\varnothing r_2$	a	Type	i_N	r_1	$\varnothing r_2$	a	Type	r_1	$\varnothing r_2$	a
PC 14*					PD 14*								
PC 16*					PD 16*								
PC 18	4...14	249	190	293	PD 18	16...45	247	132	387	PE 18	218	140	293
	16...18	219	132			50...100	239	115					
PC 20	5,6...20	249	190	347	PD 20	22,4...63	247	132	441	PE 20	218	140	347
	22,4...25	219	132			71...140	239	115					
PC 22	4...14	296	210	376	PD 22	20...45	256	140	492	PE 22	275	175	376
	16...18	275	175			50...71		132					
PC 25	5,6...20	296	210	434	PD 25	25...56	256	140	550	PE 25	275	175	434
	22,4...25	275	175			63...90		132					
PC 28	4...18	322	210	464	PD 28	16...45	332	190	591	PE 28	322	210	464
						50...100	300	148					
PC 31	5,6...25	322	210	532	PD 31	22,4...63	332	190	659	PE 31	322	210	532
						71...140	300	148					
PC 35	*			570	PD 35				734	PE 35	372	250	570
	11,2...14	372	250			16...45	347	210					
	16...18	344	210			50...100	330	188					
PC 40*	14...18	372	250	647	PD 40	20...56	347	210	811	PE 40	372	250	647
	20...22,4	344	210			63...125	330	188					
PC 42*				693	PD 42	16...45	404	245	894	PE 42	456	315	693
						50...100	394	210					
PC 45*				759	PD 45	20...56	404	245	960	PE 45			759
						63...125	394	210					
PC 47*				845	PD 47	25...71	404	245	1046	PE 47	456	315	845
						80...160	394	210					

* On request

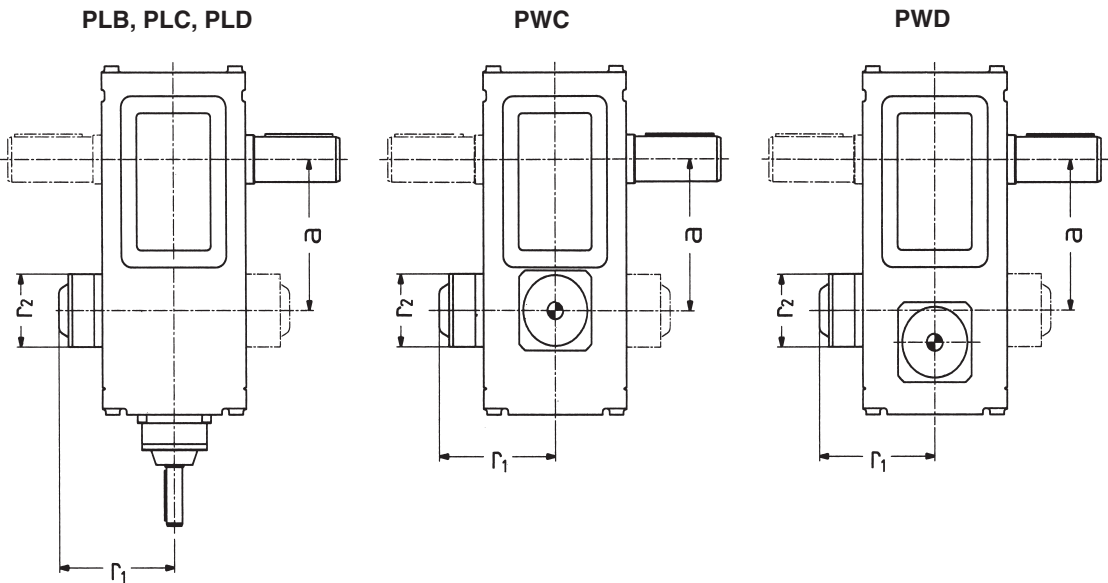
Location of shafts and direction of rotation, see dimension sheets.
Backstops have adequate capacities to deal with full rated torque.

Dimensions

3.99

Backstop devices for bevel-helical gear units

Type



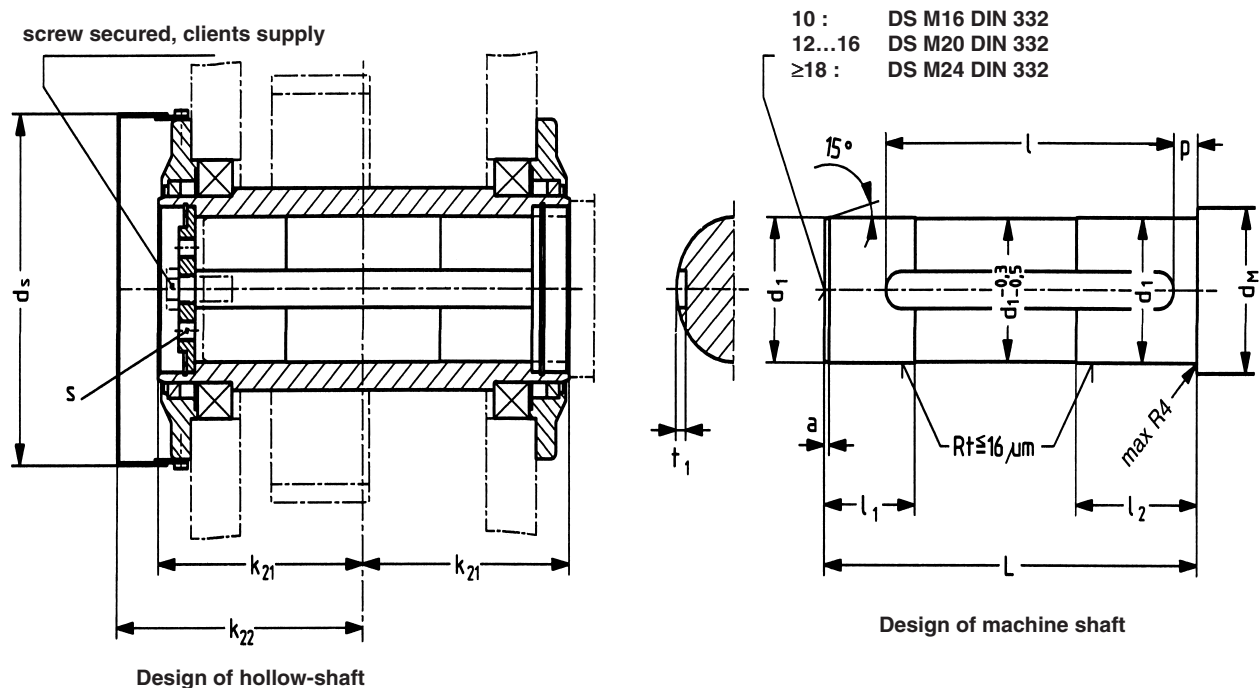
Size	r_1	$\varnothing r_2$	a
14	182	105	216
16			272
18			293
20	218	140	347
22			376
25			434
28	322	210	464
31			532
35			570
40	372	250	647
42			693
45			759
47	456	315	845
50			857
53			928
56	520	342	1021
60			1032
63			1105
67	626	440	1176
PLB10			94
PLB12			127
PLB16			164
PLB20			201
PLB25			247
PLB31			302
PLB40			374
PLB45			449

Location of shafts and direction of rotation, see dimension sheets

Backstops have adequate capacities to deal with full rated torque.

Dimensions

Hollow-shaft design with key-way



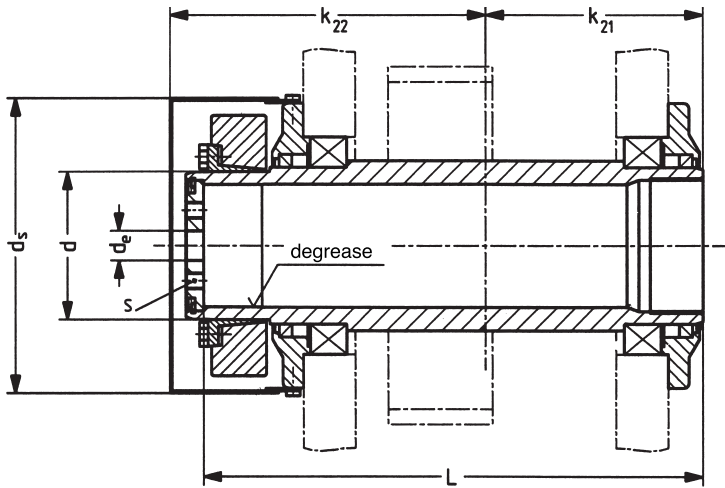
Key of machine shaft not to be supplied by ELECON.

Gearbox Size	Any types except PLB														
	a	$\emptyset d_1 h_6$	$\emptyset d_{M \min}$	$\emptyset d_s$	k 21	k 22	l ₁	l ₂	L	l _{min}	p	t ₁	s	Screw ISO 4014	key b x h
14	5	65	77	180	123	140	50	72	215	180	19	4,8	M 10	M 20 x 55	18 x 7
16	5	75	96	230	123	139	60	82	215	180	18	7,5	M 12	M 20 x 55	20 x 12
18	5	90	107	230	157	173	70	95	279	250	18	6,2	M 12	M 24 x 60	25 x 9
20	5	100	120	282	157	173	80	109	276	220	24	10	M 16	M 24 x 65	28 x 16
22	5	110	128	282	189	205	90	119	340	280	24	10	M 16	M 24 x 65	28 x 16
25	6	130	150	308	215	250	100	132	388	280	26	11	M 20	M 24 x 70	32 x 18
28	6	140	160	338	250	300	110	147	453	320	29	12	M 20	M 24 x 70	36 x 20
31	6	160	180	363	250	300	125	162	453	320	27	13	M 20	M 24 x 70	40 x 22
35	6	170	190	380	285	320	135	180	515	400	35	13	M 20	M 24 x 70	40 x 22
40	6	190	210	410	285	320	150	195	515	400	32	15	M 20	M 24 x 70	45 x 25
Type	Only PLB														
PLB 10	5	42	53	180	123	140	40	58	219	140	18	3,9	M 10	M 16 x 45	12 x 6
PLB 12	5	65	77	180	157	174	60	82	283	180	18	4,8	M 10	M 20 x 55	18 x 7
PLB 16	5	75	96	230	189	206	60	82	347	180	18	7,5	M 12	M 20 x 55	20 x 12
PLB 20	5	100	120	282	220	236	80	109	402	220	24	10	M 16	M 24 x 70	28 x 16
PLB 25	6	120	140	308	265	297	95	123	492	280	22	11	M 16	M 24 x 70	32 x 18
PLB 31	6	140	160	338	310	354	110	149	573	320	29	12	M 20	M 24 x 70	36 x 20
PLB 40	6	170	190	380	380	412	135	180	705	400	35	13	M 20	M 24 x 70	40 x 22

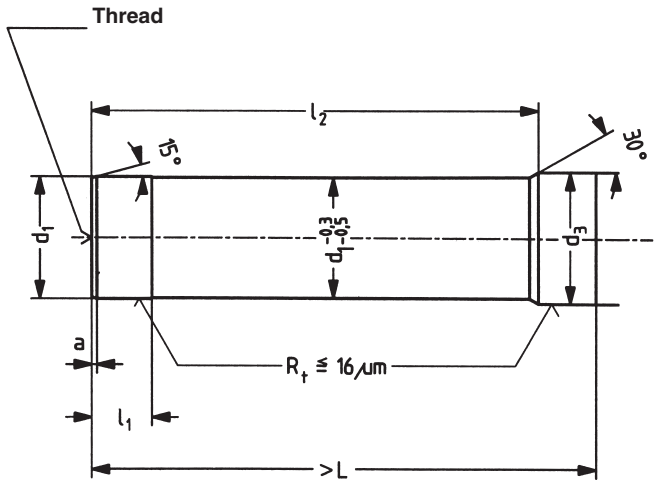
Dimensions

3.99

Hollow-shaft design with shrink disc



Mounting of shrink disc



Design of machine shaft

Assembling and replacing the shrink disc according to instruction Manual

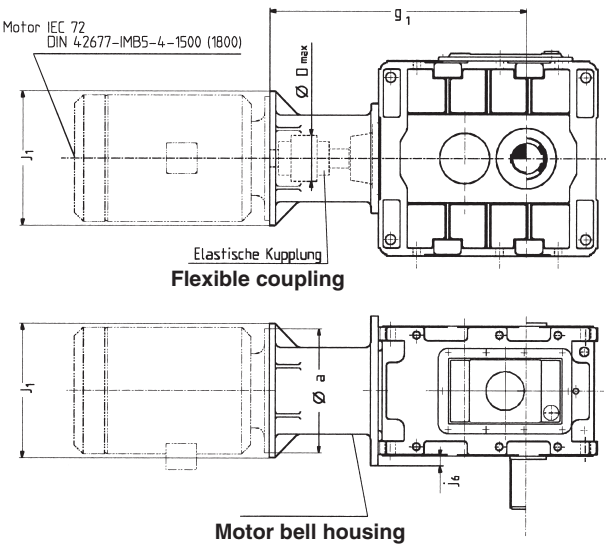
1) Screw tightening torque

Gearbox Size	Shrink disc				Hollow shaft						Machine shaft				
	Type	Ø d	Screw	T _{a 1}) [Nm]	Ø d _s	k ₂₁	k ₂₂	Ø d _e	s	L	a	Ø d ₁ h6	Ø d ₃ f6	l ₁	l ₂
14	80 - 81	80	M 10	70	149	123	197	22	M 10	283	5	70	70	34	256
16	100 - 81	100	M 10	70	199	123	197	23	M 12	290	5	80	80	44	253
18	110 - 81	110	M 12	121	199	157	231	25	M 12	367	5	90	90	50	325
20	125 - 81	130	M 12	121	251	157	247	27	M 16	371	5	100	105	54	324
22	140 - 81	140	M 14	193	251	189	279	27	M 16	443	5	110	115	58	392
25	165 - 81	170	M 16	295	315	215	340	27	M 20	504	6	130	135	70	442
28	175 - 81	180	M 16	295	345	250	360	33	M 20	576	6	140	150	70	514
31	200 - 71	200	M 16	250	365	250	375	33	M 20	594	6	160	170	85	517
35	220 - 71	220	M 16	250	385	285	430	33	M 20	677	6	170 g6	180	104	581
40	240 - 71	240	M 20	490	420	285	435	33	M 20	682	6	190 g6	200	108	582
42	260 - 71	260	M 20	490	470	315	475	33	M 20	750	6	210 g6	220	119	639
45	280 - 71	280	M 20	490	500	320	485	33	M 20	763	6	230 g6	240	130	641
47	300 - 71	300	M 20	490	540	330	515	33	M 20	800	6	245 g6	250	138	670
50	320 - 71	320	M 20	490	553	390	574	33	M 20	918	6	260 g6	270	138	788
53	340 - 71	340	M 20	490	613	390	600	33	M 20	933	6	270 g6	280	152	789
56	360 - 71	360	M 20	490	613	390	600	33	M 20	939	6	290 g6	300	158	789
60	380 - 71	380	M 24	840	693	465	705	33	M 20	1093	6	310 g6	320	162	939
63	400 - 71	400	M 24	840	693	465	705	33	M 20	1108	6	330 g6	340	162	939
67	400 - 81	400	M 27	1450	693	465	705	33	M 20	1108	6	330 g6	340	177	939
Type	Only PLB														
PLB 10	55 - 81	55	M 8	35	149	123	197	17	M 10	278	5	45	45	33	252
PLB 12	80 - 81	80	M 10	70	149	157	231	22	M 10	349	5	65	65	34	322
PLB 16	100 - 81	100	M 10	70	199	189	263	23	M 12	422	5	80	80	44	385
PLB 20	125 - 81	130	M 12	121	251	220	310	27	M 16	495	5	100	105	54	448
PLB 25	155 - 81	160	M 14	193	313	265	365	27	M 16	599	6	120	130	64	543
PLB 31	175 - 81	180	M 16	295	345	310	415	33	M 20	697	6	140	150	70	635
PLB 40	220 - 71	220	M 16	250	385	380	525	33	M 20	867	6	170 g6	180	104	770
PLB 45	260 - 71	260	M 20	490	467	445	605	33	M 20	1010	6	210 g6	220	120	900

Dimensions

Motor-Attachment KPLB..

Motor bell housing available with or without motor.
Appropriate flexible coupling is part of ELECON supply.
Overload slip clutches on request.



Type KPLB..-R1.								Type KPLB..-R1.						
Size	Pos. of gear case		**)			Motor		Size	**)			Motor		
	R ₁₀	R ₁₁	Ø D _{max}	g ₁	j ₁	Size	Ø a ₁		Ø D _{max}	g ₁	j ₁	Size	Ø a ₁	
	j ₆	j ₆												
10	28	—	182	576	350	200 _L	400	20	250	950	Ø 660	315 _{M_S}	660	
						180 _{L_M}	350					280 _{M_S}	550	
						160 _{L_M}						250 _M		
						*)	300					225 _{M_S}	450	
			155	526	260	132 _{M_S}	300		210	890	354	200 _L	400	
						112 _M	250					*)	350	
						100 _L	200					*)	300	
						*)	200					*)	250	
12	—	—	182	679	350	280 _S	550	25	360	1064	Ø 660	315 _{M_S}	660	
						250 _M						280 _{M_S}	550	
						Ø 450	225 _{M_S}					450	1034	494
				649		200 _L	400			967	404	*)	450	
						180 _{L_M}	350					*)	400	
						160 _{L_M}	300					*)	350	
			155	599	260	132 _{M_S}	300		31	360	1174	Ø 660	315 _{M_S}	660
						*)	300						280 _{M_S}	550
16	23	—	250	868	494	315 _{M_S}	660	31	360	1144	494	*)	450	
						280 _{M_S}	550					*)	400	
				250 _M		225 _{M_S}				450		1077	404	*)
				210		723	354			200 _L				400
			180 _{L_M}		350				*)	300				
			160 _{L_M}		300	*)			250	*)	250			

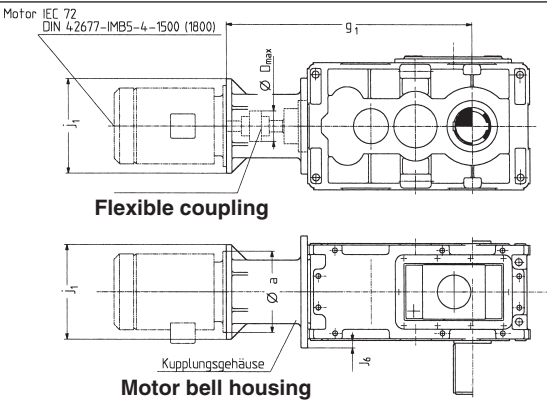
*) Other motor bell housings available

**) Maximum diameter of coupling

Dimensions

3.99

Motor-Attachment KPLC..



Motor bell housing available with or without motor.
Appropriate flexible coupling is part of ELECON
supply. Overload slip clutches on request.

Type KPLC...-R1.								Type KPLC...-R1.																			
Size	Pos. of gear case		**)			Motor		Size	Pos. of gear case		**)			Motor													
	R ₁₀	R ₁₁	Ø D _{max}	g ₁	j ₁	Size	Ø a ₁		R ₁₀	R ₁₁	Ø D _{max}	g ₁	j ₁	Size	Ø a ₁												
	j ₆	j ₆							j ₆	j ₆																	
14	28	—	182	698	350	200 ^L	400	16	—	—	182	754	350	200 ^L	400												
						180 ^{L_M}	350							180 ^{L_M}	350												
						160 ^{L_M}								160 ^{L_M}													
						*)	300							*)	300												
			155	648	260	132 ^{M_S}	300				155	704	260	132 ^{M_S}	300												
						112 ^M	250							112 ^M	250												
						100 ^L								100 ^L													
						*)	200							*)	200												
18	—	—	182	845	Ø 550	280 ^S	550	20	—	—	182	899	Ø 550	280 ^S	550												
						250 ^M								250 ^M													
						Ø 450	225 ^{M_S}							450	Ø 450	225 ^{M_S}	450										
						815	350							200 ^L	400	869	350	200 ^L	400								
				180 ^{L_M}	350							180 ^{L_M}	350														
				160 ^{L_M}								160 ^{L_M}															
				132 ^{M_S}	300							132 ^{M_S}	300														
				155	765	260	*)					300	155	819	260	*)	300										
			*)				250				*)	250															
			*)				200				*)	200															
			22				23				—	250				1080	Ø 660	315 ^{M_S}	660	25	—	—	250	1138	Ø 660	315 ^{M_S}	660
																		280 ^{M_S}	550							280 ^{M_S}	550
																		250 ^M								250 ^M	
																		225 ^{M_S}	450							225 ^{M_S}	450
												210				935	354	200 ^L	400				210	993	354	200 ^L	400
				180 ^{L_M}	350	180 ^{L_M}							350														
160 ^{L_M}		160 ^{L_M}																									
*)	300	*)		300																							
990	Ø 300	*)	250	1048	Ø 300	*)	250																				
		*)				*)																					
28	—	—	250	1213	Ø 660	315 ^{M_S}	660	31	—	—	250	1281	Ø 660	315 ^{M_S}	660												
						280 ^{M_S}	550							280 ^{M_S}	550												
						250 ^M								250 ^M													
						225 ^{M_S}	450							225 ^{M_S}	450												
				210	1153	354	200 ^L					400	210	1221	354	200 ^L	400										
							*)					350				*)	350										
			*)				300				*)	300															
			*)				250				*)	250															
			1123		Ø 300	*)					1191	Ø 300		*)													
						*)								*)													

*) Other motor bell housings available

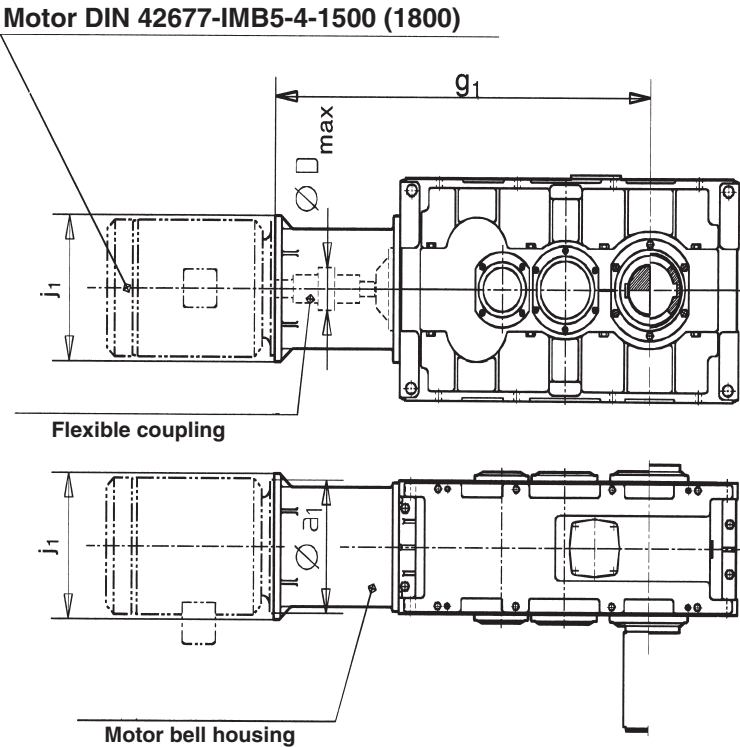
**) Maximum diameter of coupling

Dimensions

3.99

Motor-Attachment KPLC..

Motor bell housing available with or without motor. Appropriate flexible coupling is part of ELECON supply. Overload slip clutches on request.



Type KPLC..-R1.						Type KPLC..-R1.					
Size	**) Ø D max			Motor		Size	**) Ø D max			Motor	
	g 1	j 1		Size	Ø a 1		g 1	j 1		Size	Ø a 1
35	360	1487	Ø 660	315 ^M _S	660	40	360	1564	Ø 660	315 ^M _S	660
				280 ^M _S	550					280 ^M _S	550
		1457	494	250 ^M	550			1534	494	250 ^M	550
				*)	450					*)	450
		1390	404	*)	400			1467	404	*)	400
				*)	350					*)	350
42	360	1710	Ø 660	315 ^M _S	660	45	360	1776	Ø 660	315 ^M _S	660
				280 ^M _S	550					280 ^M _S	550
		1680	494	*)	450			1746	494	*)	450
				*)	400					*)	400
		1613	404	*)	350			1679	404	*)	400
				*)	350					*)	350
47	360	1862	Ø 660	315 ^M _S	660						
				280 ^M _S	550						
		1832	494	*)	450						
				*)	400						
		1765	404	*)	350						
				*)	350						

*) Other motor bell housings available

**) Maximum diameter of coupling

Motor-Attachment KPLD..



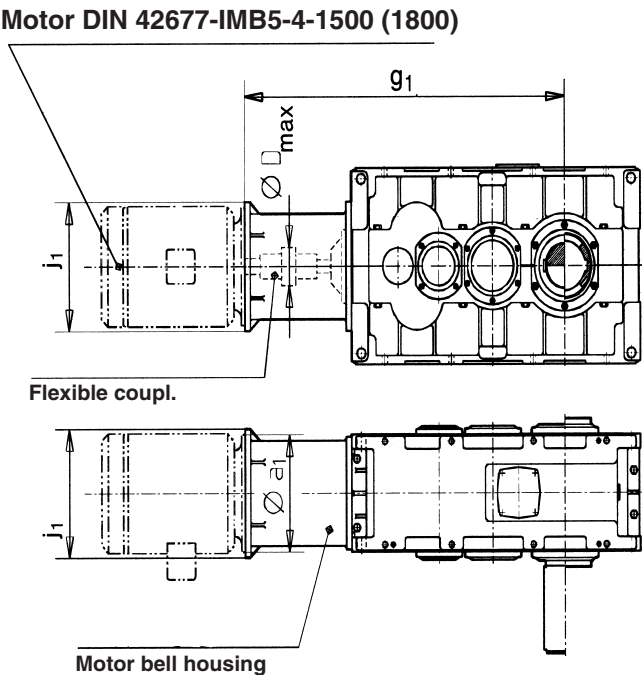
*) Other motor bell housings available
 **) Maximum diameter of coupling

Dimensions

3.99

Motor-Attachment KPLD..

Motor bell housing available with or without motor. Appropriate flexible coupling is part of ELECON supply. Overload slip clutches on request.



Type KPLD..-R1.						Type KPLD..-R1.							
Size	**) Ø D max		g 1	j 1	Motor		Size	**) Ø D max		g 1	j 1	Motor	
	Size	Ø a 1			Size	Ø a 1							
35	360	1457	494	280 ^M _S	550	40	360	1534	494	280 ^M _S	550		
				250 ^M	550					250 ^M	550		
				225 ^M _S	450					225 ^M _S	450		
		1390	404	200 ^L	400			1467	404	200 ^L	400		
				180 ^L _M	350					180 ^L _M	350		
				160 ^L	350					160 ^L	350		
42	360	1710	Ø 660	315 ^M _S	660	45	360	1776	Ø 660	315 ^M _S	660		
		1680	494	280 ^M _S	550			1746	494	280 ^M _S	550		
				250 ^M	450					250 ^M	450		
				225 ^M _S	450					225 ^M _S	450		
		1613	404	200 ^L	400			1679	404	200 ^L	400		
				180 ^L	350					180 ^L	350		
47	360	1862	Ø 660	315 ^M _S	660								
		1832	494	280 ^M _S	550								
				250 ^M	450								
				225 ^M _S	450								
		1765	404	200 ^L	400								
				180 ^L	350								

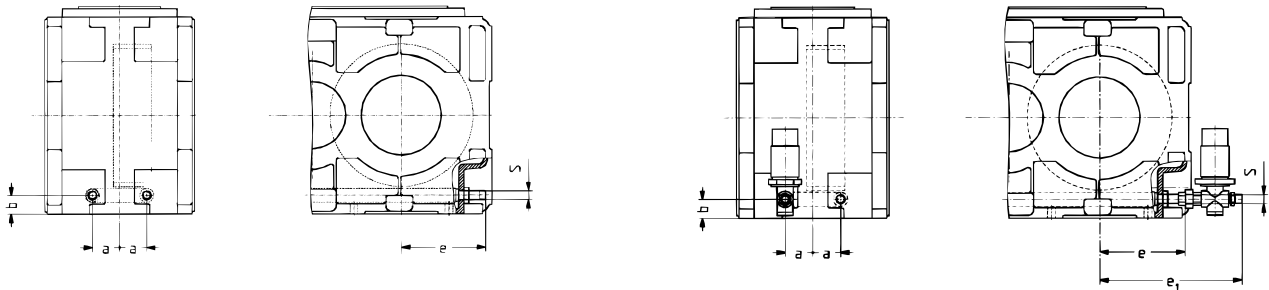
*) Other motor bell housings available

**) Maximum diameter of coupling

Dimensions

Cooling coil for horizontal position of gear case R1

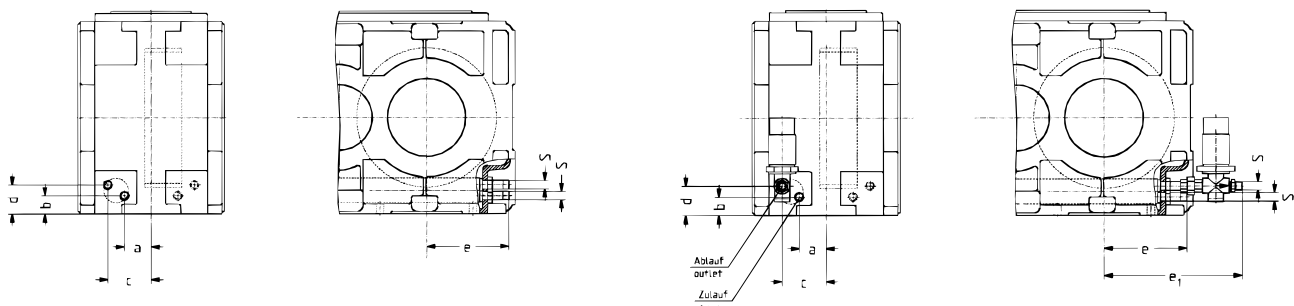
Only PC14, PD14, PLC14, PLD14, PWC14, PWD14



Water connection for cooling coil without cooling water controller

Water connection for cooling coil with cooling water controller

from PC16, PD16, PE18, PLB10, PLC16, PLD16, PWC16, PWD16



Water connection for cooling coil without cooling water controller

Water connection for cooling coil with cooling water controller

Cooling coil placed adjacent to the final gear wheel. For the gear wheel position see the dimension sheets.

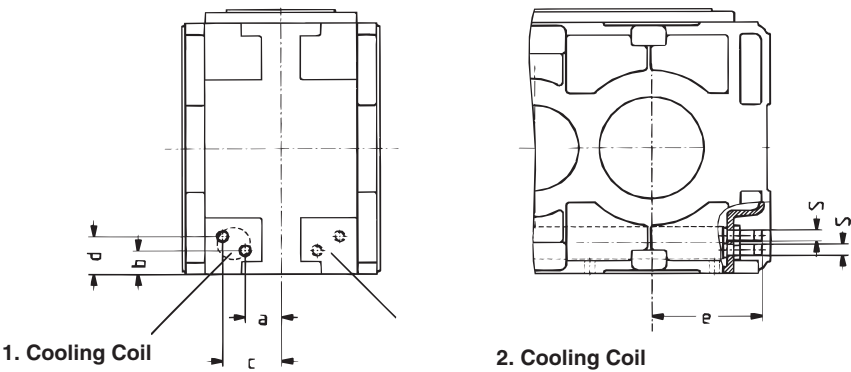
Size	a	b	c	d	e	e ₁	s *)	V _{water} l / min	Δ p w bar
14	36	34	—	—	144	297	R 3/8 A	6	0.3
16	38	34	38	74	193	346	R 3/8 A		0.55
18	44	42	77	65	170	323	R 3/8 A		0.3
20	44	42	74	69	226	379	R 3/8 A		0.75
22	53	48	88	67	201	354	R 3/8 A		0.75
25	55	48	76	115	263	399	R 1/2 A	12	0.75
28	55	63	114	101	239	375	R 1/2 A		0.55
31	58	60	111	106	300	436	R 1/2 A		1.1
35	45	87	115	87	300	436	R 1/2 A		0.75
40	35	97	125	97	376	512	R 1/2 A		0.5
42	40	100	130	100	337	473	R 1/2 A		0.4
45	40	100	130	100	405	541	R 1/2 A		0.5
47	40	105	130	105	487	623	R 1/2 A	18	0.5
50	55	120	165	120	415	554	R 3/4 A		0.5
53	55	120	165	120	490	629	R 3/4 A		0.6
56	55	125	165	125	588	727	R 3/4 A		0.6
60	80	125	190	125	495	634	R 3/4 A		0.6
63	80	125	190	125	570	709	R 3/4 A		0.6
67	80	125	190	125	645	784	R 3/4 A		0.6
PLB 10	On request							6	
PLB 12	44	44	77	67	159	312	R 3/8 A		0.3
PLB 16	55	48	76	115	193	329	R 1/2 A	12	0.55
PLB 20	58	58	116	98	208	344	R 1/2 A		0.75
PLB 25	54	55	118	118	250	386	R 1/2 A		0.4
PLB 31	68	55	127	123	293	429	R 1/2 A		0.5
PLB 40	94	117	204	117	372	511	R 3/4 A	18	0.6
PLB 45	156	120	266	120	440	579	R 3/4 A		0.6

*) R indicates BSP

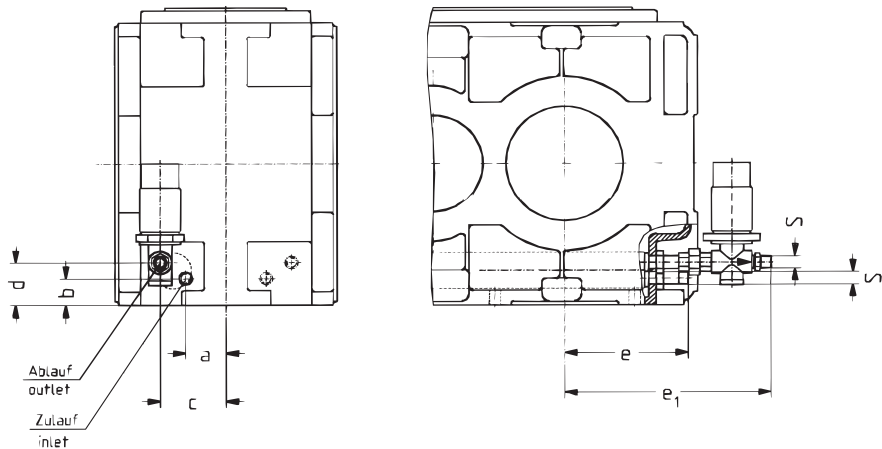
Dimensions

3.99

Cooling coil for horizontal position of gear case R1



Water connection for cooling coil without cooling water controller



Water connection for cooling coil with cooling water controller

Water connections by the output side, optionally 1 or 2 cooling coils

Size	a	b	c	d	e	e ₁	s *)	V _{water} l / min	Δ p w bar
PB10	On request							6	
PB12	44	44	77	67	158	311	R 3/8 A		0.3
PB16	56	45	82	110	196	332	R 1/2 A	12	0.55
PB20	58	58	116	98	211	347	R 1/2 A		0.75
PB25	54	55	118	118	255	391	R 1/2 A		0.4
PB31	68	55	127	123	298	434	R 1/2 A		0.5
PB40	On request								
PB45									

*) R indicates BSP

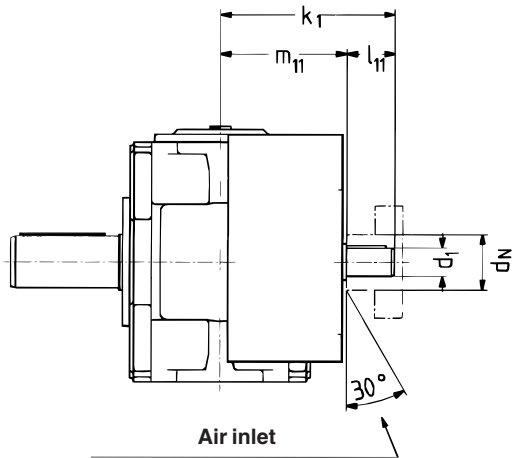
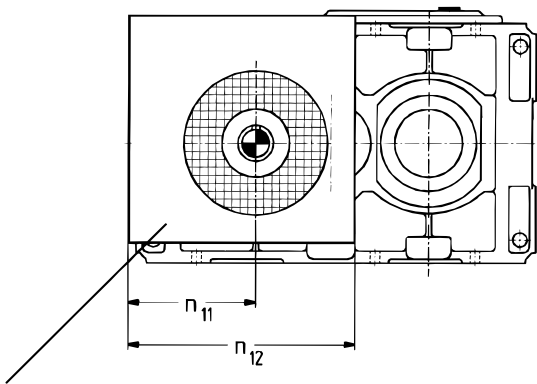
Dimensions

3.99

Gear Box PB / PC / PD Fan cooling

Permissible location of shafts .1 and .2, see 900-...-MB2 / MB4

Type
PB...R11
PC...R11
PD...R11



Attention : To mount the base-fitting secrws, desmount the fan cover. Mount the output hub only after mounting of the base-fitting screws.

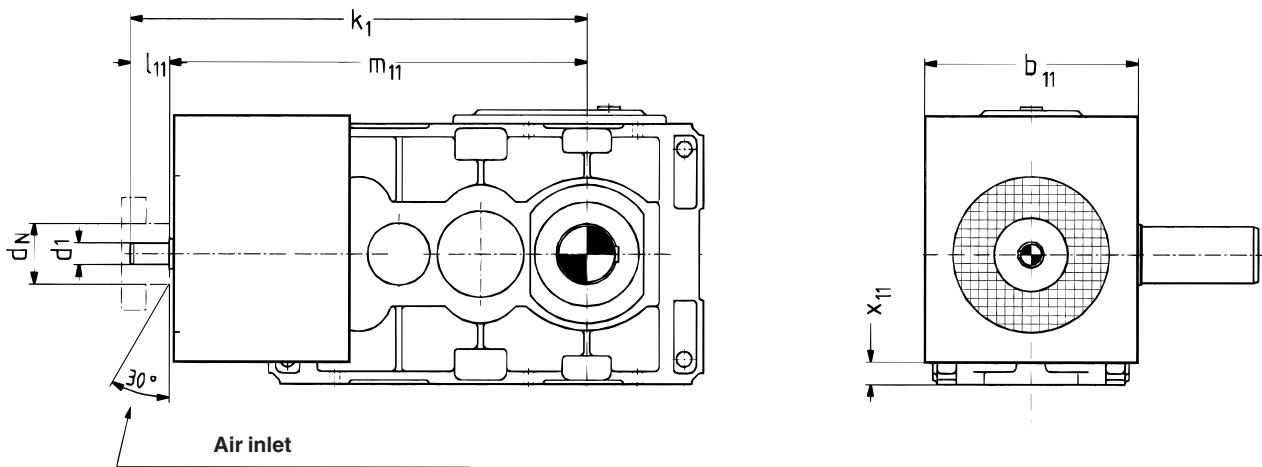
Type	d_1 acc. to ratios		dN_{max}	k_1	l_{11}	m_{11}	n_{11}	n_{12}
PB 10	35 k6	30 k6	100	226	60	166	170	405
PB 12	50 k6	40 k6	140	280	80	200	199	520
PB 16	70 m6	—	140	338	105	233	244	640
	—	50 k6	140	318	85	233	244	
PB 20	80 m6	—	180	396	130	266	289	755
	—	65 m6	180	371	105	266	289	
PB 25	100 m6	—	180	495	175	320	309	865
	—	80 m6	180	450	130	320	309	
PB 31 *)	130 m6	—						1020
	—	100 m6	180	547	175	372	364	
PB 40 *)	*) On request							
PB 45 *)								
PC 14/16	35 k6		100	218	60	158	159	358 / 395
PC 18/20	45 k6		140	275	80	195	199	360
PC 22/25	60 m6		140	337	100	237	244	460
PC 28/31	70 m6		140	369	100	269	289	555
PC 35/40	90 m6		180	446	140	306	409	710
PC 42/45/47	100 m6		180	537	175	362	509	830
PD 14/16	—	25 k6	100	203	42	161	120	335 / 355
PD 18/20	35 k6	30 k6	100	283	60	223	120	375
PD 22/25	50 k6	40 k6	100	347	80	267	133	465
PD 28/31	50 k6	40 k6	140	362	80	282	162	555
PD 35/40	70 m6	—	140	435	105	330	245	590
PD 35/40	—	50 k6	140	415	85	330	245	590
PD 42/45/47	80 m6	—	180	508	130	378	308	830
PD 42/45/47	—	65 m6	180	483	105	378	308	830
PD 50/53/56	100 m6	—	180	595	170	425	362	645

Dimensions

3.99

Fan cooling for Gearbox PLB, PLC

Type PLB...R11
 PLC...R11

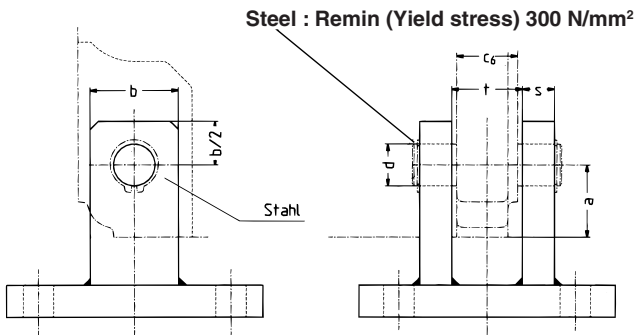
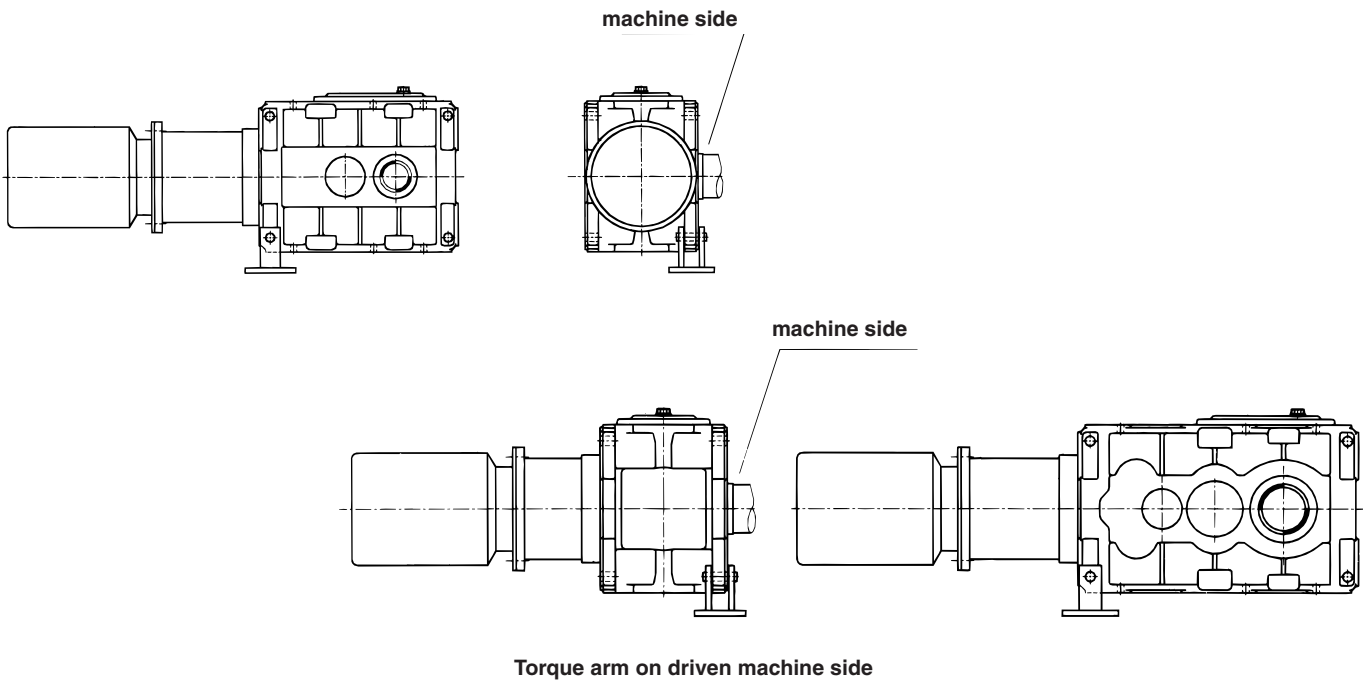


Type	b_{11}	d_1	$d_N \text{ max}$	k_1	l_{11}	m_{11}	x_{11}
PLB 10							
PLB 12	314	40 k6	100	533	80	453	39
PLB 16	380	50 k6	140	611	80	531	59
PLB 20	440	60 m6	140	723	105	618	89
PLB 25	468	75 m6	150	891	120	771	94
PLB 31	548	85 m6	180	1064	140	924	94
PLB 40	660	100 m6	180	1309	175	1134	150
PLB 45	On request						
PLC 14	246	25 k6	100	528	45	483	29
PLC 16				584		539	34
PLC 18	314	40 k6	140	699	80	619	39
PLC 20				753		673	
PLC 22	380	50 k6	140	823	80	743	49
PLC 25				881		801	59
PLC 28	440	60 m6	140	986	105	881	59
PLC 31				1054		949	89
PLC 35	468	75 m6	150	1214	120	1094	80
PLC 40				1291		1171	79
PLC 42	548	85 m6	180	1455	140	1315	89
PLC 45				1521		1381	109
PLC 47				1607		1467	109
PLC 50	660	100 m6	180	1792	175	1617	150
PLC 53				1863		1688	150
PLC 56				1956		1781	170

Dimensions

3.99

Torque reaction arm for hollow-shaft gear unit

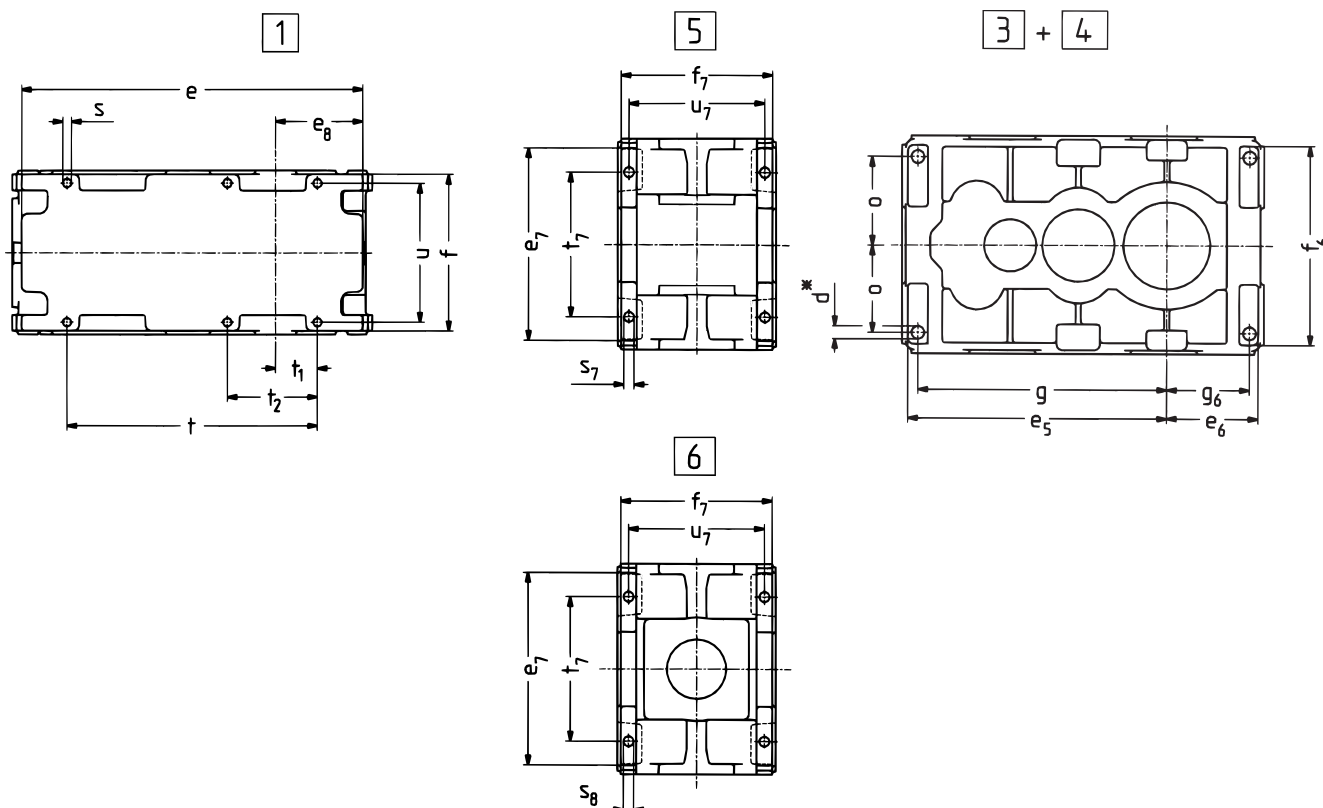


Torque arm not supplied by ELECON

Gearbox Size	a	t	c6	d ^{H9/h6}	b	s
14 - 16	29	29	27	16	40	10
18 - 20	35	35	32	22	45	16
22 - 25	45	45	41	26	55	20
28 - 31	53	53	48	33	70	25
35 - 40	45	60	55	40	80	30
42 - 45	50	68	62	45	110	35
47	60	68	62	52	125	40
50 - 56	65	82	75	60	130	45
60 - 63	70	98	90	65	140	50
67	80	98	90	70	140	50
PLB 10						
PLB 12	35	35	32	22	45	16
PLB 16	45	45	41	26	55	20
PLB 20	53	53	48	33	70	25
PLB 25	53	53	48	33	70	25
PLB 31	52	53	48	33	70	25
PLB 40	50	68	62	45	110	35
PLB 45	65	82	75	60	130	45

Dimensions

Fixing holes of gear case



*) Fixing holes for type PLB see dimensions sheet 900-1220-MB9, for type PB on request

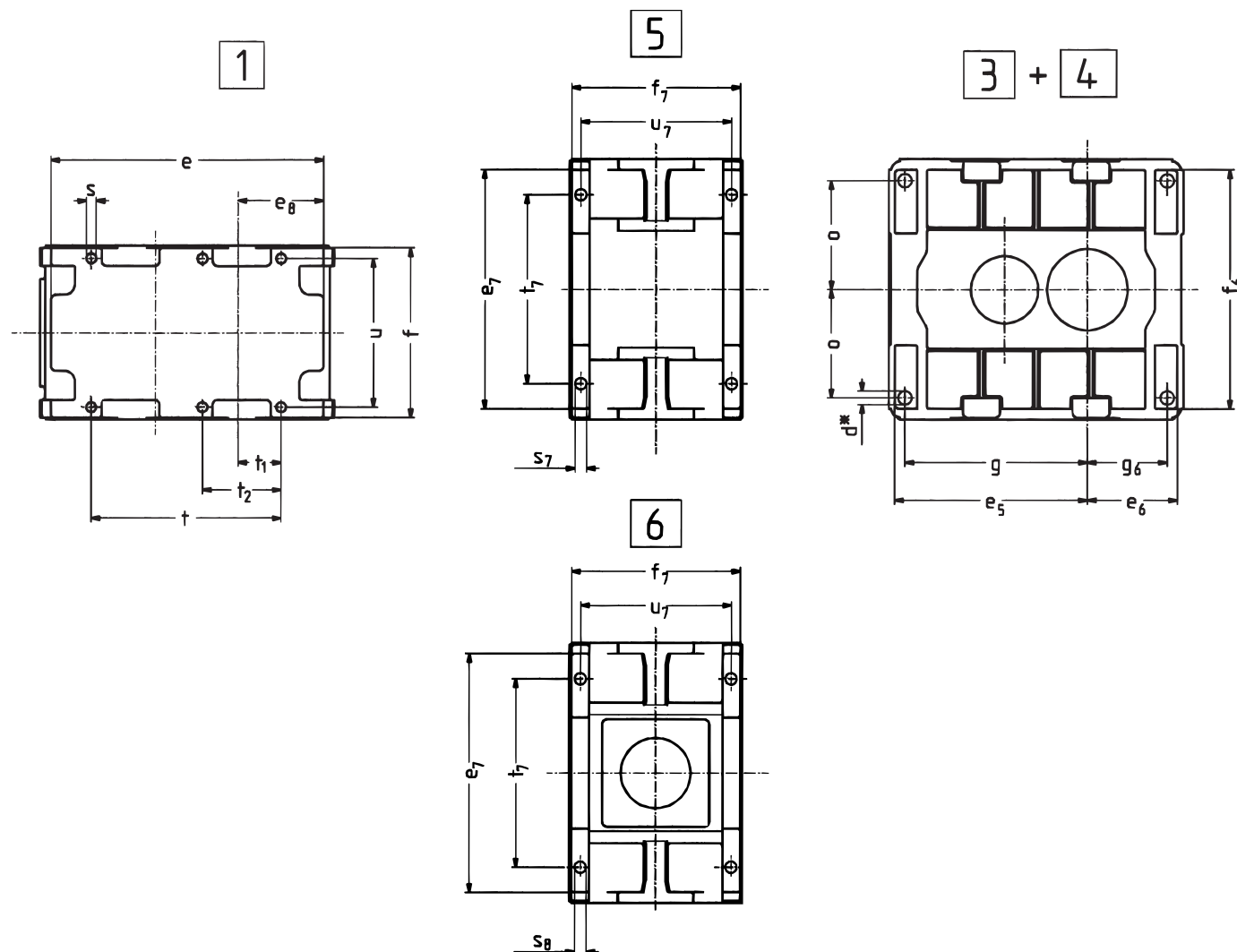
*) Size	Mounting surface [1]									Mounting surface [3] + [4]								
	e	e8	f	Ø s	ds x lmax	t	t1	t2	u	Ø d H9	ds x lmax	TA[Nm]* 10.9	e5	e6	f6	g	g6	o
P..14	474	121	216	12	M10x45	348	58	125	192	16	M14x65	180	357	126	274	344	113	121
P..16	579	170	216	12	M10x80	453	107	217	192	16	M14x65	180	413	175	334	400	162	151
P..18	622	155	284	14.5	M12x55	486	87	175	248	22	M20x80	550	475	162	348	458	145	155
P..20	732	211	284	14.5	M12x90	596	143	285	248	22	M20x80	550	528	218	414	511	201	190
P..22	782	193	346	18.5	M16x65	622	113	226	306	26	M24x100	950	600	200	426	580	180	190
P..25	896	249	346	18.5	M16x90	736	169	340	306	26	M24x100	950	658	256	486	638	236	220
P..28	948	230	408	24	M20x80	752	132	265	360	33	M30x120	1900	731	245	508	706	221	227
P..31	1085	299	408	24	M20x110	889	201	402	360	33	M30x120	1900	798	307	574	773	282	262

*) Size	Mounting surface [5]						Mounting surface [6]					
	e7	f7	Ø s7	ds x lmax	t7	u7	e7	f7	Ø s8	ds x lmax	t7	u7
P..14	274	216	14,5	M12x90	206	194	274	216	14,5	M12x90	206	194
P..16	334	216	14,5	M12x90	266	194	334	216	14,5	M12x90	266	194
P..18	348	284	16,5	M14x100	260	258	348	284	16,5	M14x100	260	258
P..20	414	284	16,5	M14x100	330	258	414	284	16,5	M14x100	330	258
P..22	426	346	24	M20x130	326	312	426	346	24	M20x130	326	312
P..25	486	346	24	M20x130	384	312	486	346	24	M20x130	384	312
P..28	504	408	28	M24x150	386	366	504	408	28	M24x150	386	366
P..31	574	408	28	M24x150	456	366	574	408	28	M24x150	456	366

*) Necessary tightening torques TA for shaft screws with head support according to DIN 912.934 etc. strength category 10.9 with supposed coefficient of friction $\mu = 0.125$ for non treated, oiled screws according to the VDI directions 2230.

Dimensions

Fixing holes of gear case - PLB



Size	Mounting surface [1]									Mounting surface [3] + [4]								
	e	e ₈	f	Ø s	d _s x l _{max}	t	t ₁	t ₂	u	Ø d _{H9}	d _s x l _{max}	T _A [Nm] [*] 10.9	e ₅	e ₆	f ₆	g	g ₆	o
PLB 10	338	107	216	12	M10x45	218	50	-	192	16	M14x65	180	235	112	274	222	99	121
PLB 12	448	147	284	14.5	M12x70	311	78	-	248	22	M20x80	550	309	155	348	292	138	155
PLB 16	556	179	348	18.5	M16x110	396	99	-	306	26	M24x100	950	388	190	486	368	170	220
PLB 20	662	207	410	24	M20x130	461	104	-	360	33	M30x120	1900	467	219	578	442	194	262
PLB 25	772	251	438	24	M20x160	574	152	-	388	33	M30x120	1900	533	263	698	508	238	322
PLB 31	928	297	522	28	M24x180	716	191	315	468	33	M30x180	1900	643	309	798	618	284	373

Size	Mounting surface [5]						Mounting surface [6]					
	e_7	f_7	$\varnothing s_7$	$d_s \times l_{max}$	t_7	u_7	e_7	f_7	$\varnothing s_8$	$d_s \times l_{max}$	t_7	u_7
PLB 10	274	216	14.5	M12x75	206	194	274	216	14.5	M12x80	206	194
PLB 12	348	284	16.5	M14x100	260	258	348	284	16.5	M14x100	260	258
PLB 16	486	348	24	M20x130	384	312	486	348	24	M20x130	384	312
PLB 20	578	410	28	M24x150	456	366	578	410	28	M24x150	456	366
PLB 25	698	438	28	M24x180	578	396	698	438	28	M24x180	578	396
PLB 31	798	522	28	M24x180	678	474	798	522	28	M24x180	678	474

*) Necessary tightening torques T_A for shaft screws with head support according to DIN 912.934 etc. strength category 10.9 with supposed coefficient of friction $\mu = 0.125$ for non treated, oiled screws according to the VDI directions 2230.



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