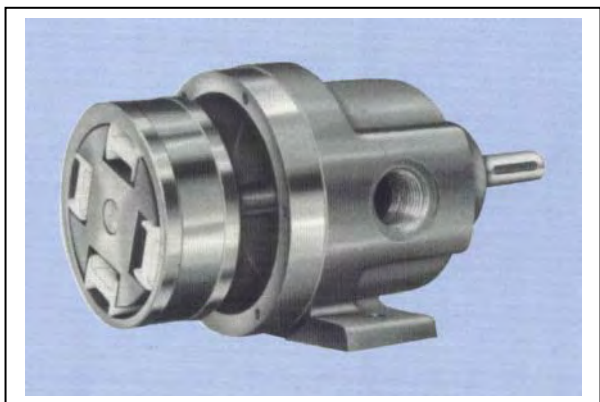

Stoz-Sugo: oil circulating pump



Pict. 1 – type KSW (exploded view)

Operation

Self priming cell pumps (see picture 1)

Application

- Machine tools
- Gear boxes
- Conveyors
- Compressors
- Textile machines
- Ecc. ecc.

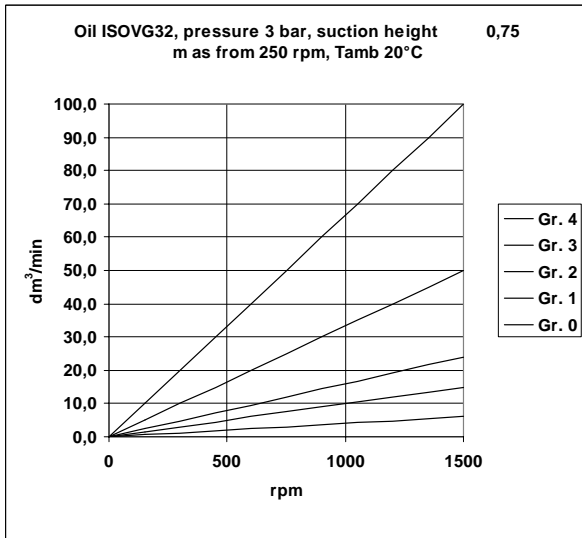
MAIN FEATURES

- Long life whilst maintaining constant output and pressure
- Self lubricated during operation and maintenance free
- Self priming even after prolonged standstill
- Multi circuit pumps consist of several shaft mounted annular pump arranged on a common shaft
- Pumps type KSW with alternating direction of rotation, with uni-directional liquid flow, operate without valves with maximum reliability
- Operating from speeds as low as 100 rpm
- Self priming up to an oil viscosity of 10.000 mm²/s (cSt)
- Reduced output of 1 dm³/min (size pump 0)
- Customized pump on request

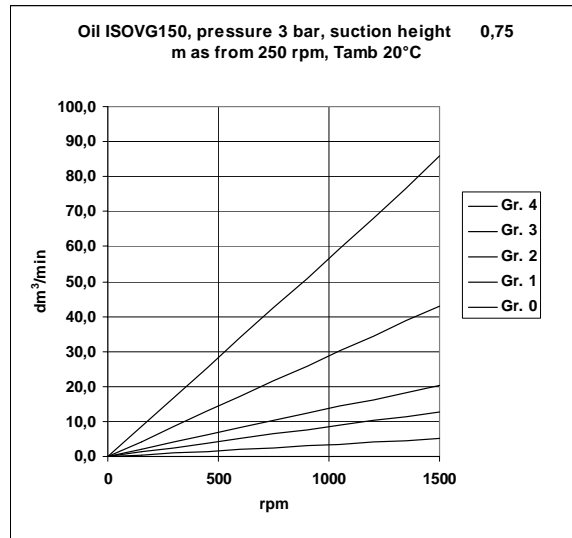
TECHNICAL COMMON DATA

- **Medium**
 - fluid oil up to 10.000 mm²/s (cSt)
 - coolant
 - **Pressure**
 - 3 bar
 - 10 bar (with special bearings)
 - **Direction of rotation**
 - type N (fixed direction of rotation)
 - type KSW (changing direction of rotation, constant direction of flow, without valve)
 - **Flow rate**
 - from 6 to 100 dm³/min at 1500 rpm depending on pump size
 - special model with reduced flow
 - **Output capacity**
 - up to 1500 rpm linear, then constant; varies according to oil, number of revolution and suction height. See the characteristic curves (picture 2 and picture 3) on page 2
 - **Drive speed**
 - minimum 100 rpm, at maximum suction height of 300 mm, standard models
 - maximum 2000 rpm, standard models
 - maximum 3000 rpm, with special bearings for pump size 0....2
 - **Suction height**
 - depending on pump type
 - **Vibration**
 - screwed parts secured
 - **Oil temperature**
 - up to 85 °C standard, then viton seal
 - from 100 °C steel vanes (max. 140°C)
 - **Maintenance**
 - not required: all pumps are designed for self lubrication by the pumped lubricant
 - after a prolonged standstill you can fill with oil the suction pipe
-

CHARACTERISTIC CURVES



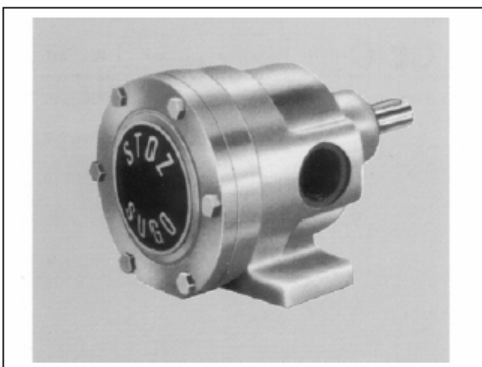
Pict. 2 – characteristic curve



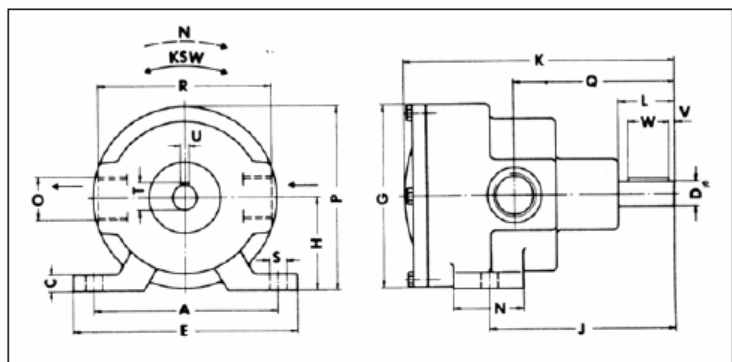
Pict. 3 – characteristic curve

1. Foot pumps type N and KSW

- **type N:** for fixed direction of rotation
- **type KSW:** for changing direction of rotation with constant direction of flow, without reversing valve
- **installation:** horizontally and vertically mounted pump, shaft "upward"
- **suction height:** 2 m t 1500 rpm (depending upon number of revolutions and oil viscosity)



Pict. 4 - foot pump



Dimensions table

Size	A	C	D ₁₆	E	G	H	J	K	L	N	O	P	Q	R	S	T	U	V	W
0	85	8	12	105	79	44	93	125	28	30	R ¼"	83	83	74	8,5	13,5	4	3	20
1	90	8	12	110	91	46	93	134	28	35	R ½"	91	80	84	8,5	13,5	4	3	20
2	90	8	12	110	91	46	101	146	28	35	R ¾"	91	85	83	8,5	13,5	4	3	20
3	104	9	15	130	117	60	120	171	35	60	R 1"	119	90	107	11	17	5	4	25

Remark: with special bearings for 10 bar, dimension K is cover side ca. 10 mm longer

Performance table: suction height 0,75 m, oil ISOVG32 (cSt 40°C), T_{amb} 20 °C

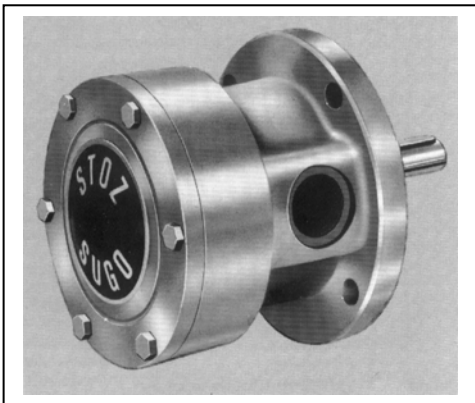
Size	Suction pipe	Speed (rpm)	Flow normal (dm ³ /min)	Power req. (Kw)		Weight (Kg)	Max speed (rpm)		Code number			
				3 bar	10 bar		3 bar	10 bar	3 bar		10 bar	
									N	KSW	N	KSW
0	R ¼"	1500	6	0,25	0,37	2,2	2000	3000	9041/400	9041/410	9041/050	9041/055
1	R ½"	1500	15	0,37	0,55	2,5	2000	3000	9041/401	9041/411	9041/051	9041/056
2	R ¾"	1500	24	0,55	0,75	2,8	2000	3000	9041/402	9041/412	9041/052	9041/057
3	R 1"	1500	50	1,10	1,50	6,3	1800	1800	9041/403	9041/413	9041/053	9041/058

Special models with reduced flow:

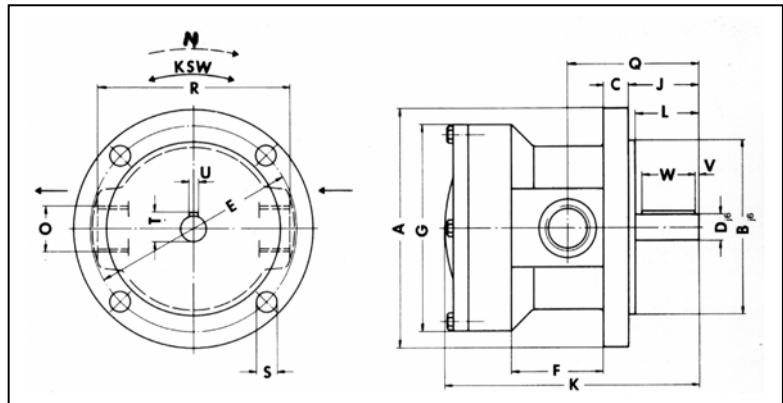
- 1..... 5 dm³/min: pump size 0
- 9.....14 dm³/min: pump size 1
- 18.....22 dm³/min: pump size 2
- 30.....45 dm³/min: pump size 3

2. Flange pumps type N and KSW

- **type N:** for fixed direction of rotation
- **type KSW:** for changing direction of rotation with constant direction of flow, without reversing valve
- **installation:** horizontally and vertically mounted pump, shaft "upward"
- **suction height:** 2 m t 1500 rpm (depending upon number of revolutions and oil viscosity)



Pict. 5 - flange pump



Dimensions table

Size	A	B ₆	C	D ₆	E	F	G	J	K	L	O	Q	R	S	T	U	V	W
0	100	60	10	12	83	29	79	28	94	25	R ¼"	50	73	6,5	13,5	4	2	20
1	110	80	11	12	95	43	96	33	119	30	R ½"	62	88	9,5	13,5	4	2	25
2	110	80	11	12	95	45	96	33	131	30	R ¾"	67	87	9,5	13,5	4	2	25
3	140	100	12	15	120	70	117	38	171	35	R 1"	93	108	10,5	17	5	4	25
4	160	120	12	20	140	-	120	38	209	35	R 1 ¼"	125	109	10,5	22,5	6	4	25

Remark: with special bearings for 10 bar, dimension K is cover side ca. 10 mm longer

Performance table: suction height 0,75 m, oil ISOVG32 (cSt 40°C), T_{amb} 20 °C

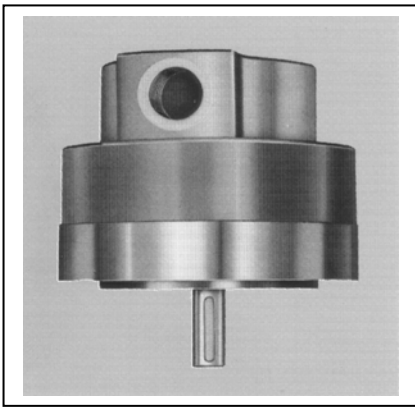
Size	Suction pipe	Speed (rpm)	Flow normal (dm ³ /min)	Power req. (Kw)		Weight (Kg)	Max speed (rpm)		Code number			
				3 bar	10 bar		3 bar	10 bar	3 bar		10 bar	
									N	KSW	N	KSW
0	R ¼"	1500	6	0,25	0,37	2,2	2000	3000	9041/420	9041/430	9041/110	9041/116
1	R ½"	1500	15	0,37	0,55	3,5	2000	3000	9041/421	9041/431	9041/111	9041/117
2	R ¾"	1500	24	0,55	0,75	3,8	2000	3000	9041/422	9041/432	9041/112	9041/118
3	R 1"	1500	50	1,10	1,50	8,2	1800	1800	9041/423	9041/433	9041/113	9041/119
4	R 1 ¼"	1500	100	2,2	-	11,0	1800	1800	9041/424	9041/434	9041/114	9041/120

Special models with reduced flow:

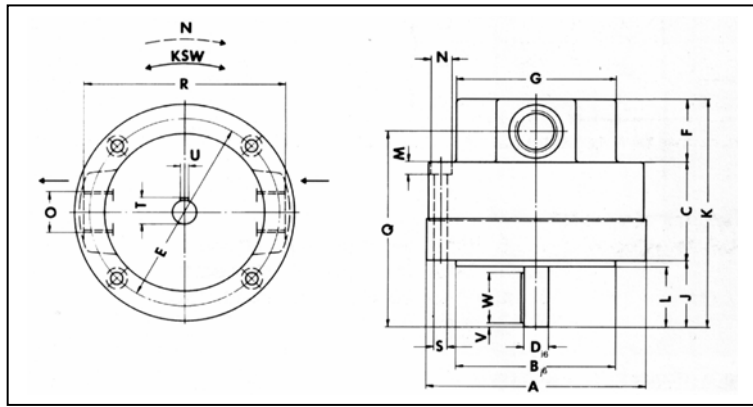
- 1..... 5 dm³/min: pump size 0
- 9.....14 dm³/min: pump size 1
- 18.....22 dm³/min: pump size 2
- 30.....45 dm³/min: pump size 3
- 55.....90 dm³/min: pump size 4

3. Flange pumps model "V", type N and KSW

- **type N:** for fixed direction of rotation
- **type KSW:** for changing direction of rotation with constant direction of flow, without reversing valve
- **installation:** vertically mounted pump, shaft "downward", and horizontal
- **suction height:** 2 m t 1500 rpm (depending upon number of revolutions and oil viscosity)



Pict. 6 - flange pump model "V"



Dimensions table

Size	A	B ₆	C	D ₆	E	F	G	J	K	L	M	N	O	Q	R	S	T	U	V	W
0	100	60	45	12	83	27	70	28	100	25	6	10,5	R 1/4"	86	89	6,5	13,5	4	2	20
1	110	80	50	12	95	32	80	33	115	30	6	10,5	R 1/2"	99	101	6,5	13,5	4	2	25
2	110	80	54	12	95	43	80	33	130	30	6	10,5	R 3/4"	107	100	6,5	13,5	4	2	25
3	140	100	74	15	120	50	100	38	162	35	8	13,5	R 1"	134	126	8,5	17	5	4	25

Remark: with special bearings for 10 bar, dimension K is cover side ca. 10 mm longer

Performance table: suction height 0,75 m, oil ISOVG32 (cSt 40°C), T_{amb} 20 °C

Size	Suction pipe	Speed (rpm)	Flow normal (dm ³ /min)	Power req. (Kw)		Weight (Kg)	Max speed (rpm)		Code number			
				3 bar	10 bar		3 bar	10 bar	3 bar		10 bar	
									N	KSW	N	KSW
0	R 1/4"	1500	6	0,25	0,37	2,2	2000	3000	9041/440	9041/450	9041/122	9041/127
1	R 1/2"	1500	15	0,37	0,55	3,5	2000	3000	9041/441	9041/451	9041/123	9041/128
2	R 3/4"	1500	24	0,55	0,75	3,8	2000	3000	9041/442	9041/452	9041/124	9041/129
3	R 1"	1500	50	1,10	1,50	8,2	1800	1800	9041/443	9041/453	9041/125	9041/130

Special models with reduced flow:

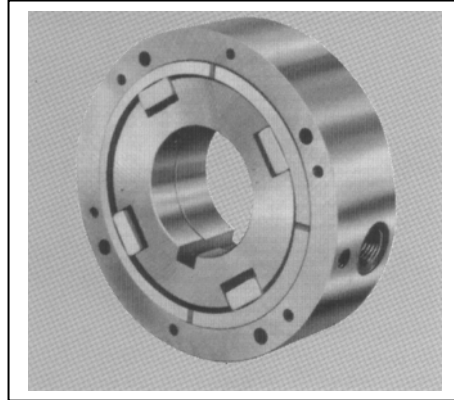
- 1..... 5 dm³/min: pump size 0
- 9.....14 dm³/min: pump size 1
- 18.....22 dm³/min: pump size 2
- 30.....45 dm³/min: pump size 3

4. Shaft mounted annular pumps type N and KSW

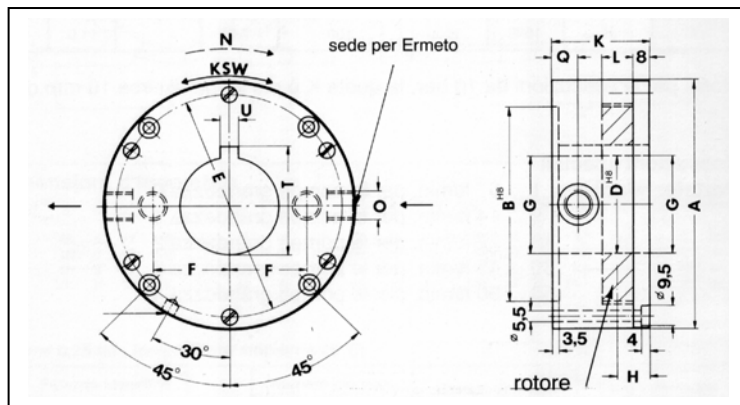
- **shaft mounted pumps:** as per construction designs approved and known for decades
- **type N:** for fixed direction of rotation
- **type KSW:** for changing direction of rotation with constant direction of flow, without reversing valve
- **type of drive:** the rotor is driven by a suitable key or stud (see Dim. L)
- **mounting:** either by fixing to a machined face or via a mating spigot in the shaft bore (Dim. F, where utilized the internal spigot is omitted, locate pump J6 ground outside diameter)
- **mounting:** with light sliding fit not keyed on
- **mounting position:** horizontal or vertical, the pump cover must be below when mounted
- **suction height:** 2 m t 1500 rpm (depending upon number of revolutions and oil viscosity)
- **standard models:** for internal mounting (within the gear box or machine), without seals



Pict. 7 - normal pump (internal mounting)



Pict. 8 - normal pump opened (without cover)



Dimensions table

Size	A	B ^{H8}	D ^{H8}	E	F	G	H	K	L	O	Q	T	U
0	85	60	15	73	20	15,2						18	5,2
	100	75	30	88	27	30,2	15	45	14	R ¼"	12	35	8,2
	115	90	45	103	35	45,2						50	8,2
	130	105	60	118	43	60,2						65	8,2
1	105	75	15	93	27	15,2						18	5,2
	120	90	30	108	35	30,2	15,5	55	15	R ½"	18	35	8,2
	135	105	45	123	42	45,2						50	8,2
	150	120	60	138	50	60,2						65	8,2
2	105	75	15	93	27	15,2						18	5,2
	120	90	30	108	35	30,2	20	70	24	R ¾"	20	35	8,2
	135	105	45	123	42	45,2						50	8,2
	150	120	60	138	50	60,2						65	8,2

Performance table: suction height 0,75 m, oil ISOVG32 (cSt 40°C), T_{amb} 20 °C

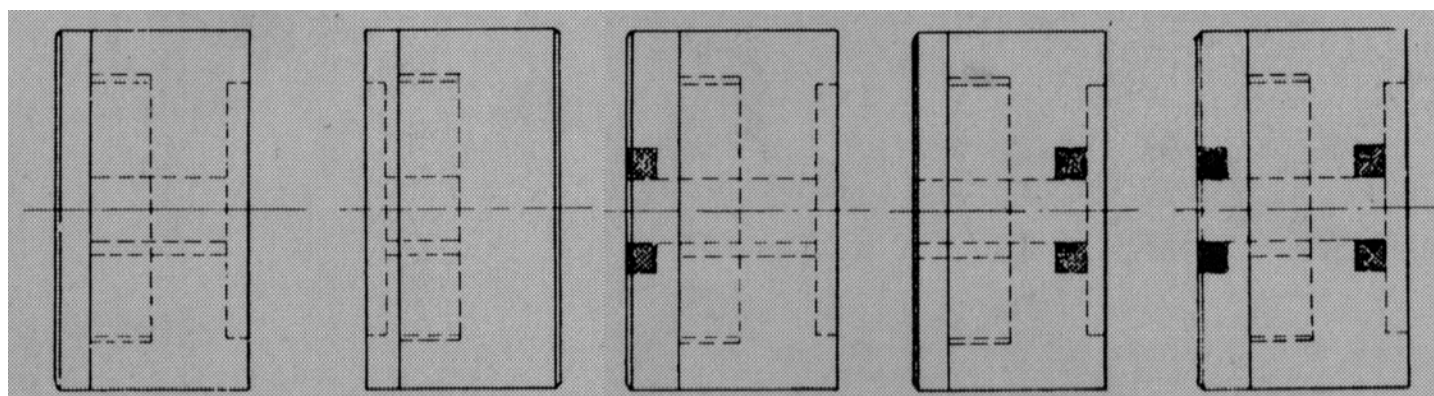
Size	Ø bore / Ø housing outside	Suction pipe	Speed (rpm)	Flow normal at 1500 rpm (dm ³ /min)	Power req. (Kw)		Weight (Kg)	Max speed (rpm)	Code number			
					3 bar	10 bar			3 bar		10 bar	
									N	KSW	N	KSW
0	15 / 85	R ¼"	1500	6	0,25	0,37	2,0	2400	9041/460	9041/490	9041/132	9041/145
	30 / 100		1200				2,2	1900	9041/461	9041/491	9041/133	9041/146
	45 / 115		1000				2,6	1500	9041/462	9041/492	9041/134	9041/147
	60 / 130		800				3,2	1300	9041/463	9041/493	9041/135	9041/148
1	15 / 105	R ½ "	1500	15	0,37	0,55	3,2	1800	9041/470	9041/500	9041/136	9041/149
	30 / 120		1200				4,0	1500	9041/471	9041/501	9041/137	9041/150
	45 / 135		1000				5,1	1300	9041/472	9041/502	9041/138	9041/151
	60 / 150		800				6,3	1100	9041/473	9041/503	9041/139	9041/152
2	15 / 105	R ¾"	1500	24	0,55	0,75	4,1	1800	9041/480	9041/510	9041/140	9041/153
	30 / 120		1200				5,1	1500	9041/481	9041/511	9041/141	9041/154
	45 / 135		1000				6,5	1300	9041/482	9041/512	9041/142	9041/155
	60 / 150		800				7,8	1100	9041/483	9041/513	9041/143	9041/156

Special models with reduced flow:

- 1..... 5 dm³/min: pump size 0
- 9.....14 dm³/min: pump size 1
- 18.....22 dm³/min: pump size 2

Models for external mounting, with seals (see pict.):

- with cover closed (Pict. 7a)
- with housing closed (Pict. 7b)
- with shaft seal in the cover (Pict. 7c)
- with shaft seal in the housing (Pict. 7d)
- with shaft seal in the cover and in the housing (Pict. e)



Pict. 7a

Pict. 7b

Pict. 7c

Pict. 7d

Pict. 7e

Remark: with shaft seal in the cover (Pict. 7c), dimensions K, H and B are respectively 5 mm larger

Performance table: suction height 0,75 m, oil ISOVG32 (cSt 40°C), T_{amb} 20 °C

Size	Ø bore / Ø housing outside	Suction pipe	Speed (rpm)	Flow normal at 1500 rpm (dm ³ /min)	Power req. (Kw)		Weight (Kg)	Max speed (rpm)	With cover closed (Pict. 7a) Code number			
					3 bar	10 bar			3 bar		10 bar	
									N	KSW	N	KSW
0	15 / 85	R ¼"	1500	6	0,25	0,37	2,0	2400	9041/700	9041/712	9041/724	9041/736
	30 / 100		1200				2,2	1900	9041/701	9041/713	9041/725	9041/737
	45 / 115		1000				2,6	1500	9041/702	9041/714	9041/726	9041/738
	60 / 130		800				3,2	1300	9041/703	9041/715	9041/727	9041/739
1	15 / 105	R ½ "	1500	15	0,37	0,55	3,2	1800	9041/704	9041/716	9041/728	9041/740
	30 / 120		1200				4,0	1500	9041/705	9041/717	9041/729	9041/741
	45 / 135		1000				5,1	1300	9041/706	9041/718	9041/730	9041/742
	60 / 150		800				6,3	1100	9041/707	9041/719	9041/731	9041/743
2	15 / 105	R ¾"	1500	24	0,55	0,75	4,1	1800	9041/708	9041/720	9041/732	9041/744
	30 / 120		1200				5,1	1500	9041/709	9041/721	9041/733	9041/745
	45 / 135		1000				6,5	1300	9041/710	9041/722	9041/734	9041/746
	60 / 150		800				7,8	1100	9041/711	9041/723	9041/735	9041/747

Performance table: suction height 0,75 m, oil ISOVG32 (cSt 40°C), T_{amb} 20 °C

Size	Ø bore / Ø housing outside	Suction pipe	Speed (rpm)	Flow normal at 1500 rpm (dm ³ /min)	Power req. (Kw)		Weight (Kg)	Max speed (rpm)	With housing closed (Pict. 7b) Code number			
					3 bar	10 bar			3 bar		10 bar	
									N	KSW	N	KSW
0	15 / 85	R ¼"	1500	6	0,25	0,37	2,0	2400	9041/748	9041/760	9041/772	9041/784
	30 / 100		1200				2,2	1900	9041/749	9041/761	9041/773	9041/785
	45 / 115		1000				2,6	1500	9041/750	9041/762	9041/774	9041/786
	60 / 130		800				3,2	1300	9041/751	9041/763	9041/775	9041/787
1	15 / 105	R ½ "	1500	15	0,37	0,55	3,2	1800	9041/752	9041/764	9041/776	9041/788
	30 / 120		1200				4,0	1500	9041/753	9041/765	9041/777	9041/789
	45 / 135		1000				5,1	1300	9041/754	9041/766	9041/778	9041/790
	60 / 150		800				6,3	1100	9041/755	9041/767	9041/779	9041/791
2	15 / 105	R ¾"	1500	24	0,55	0,75	4,1	1800	9041/756	9041/768	9041/780	9041/792
	30 / 120		1200				5,1	1500	9041/757	9041/769	9041/781	9041/793
	45 / 135		1000				6,5	1300	9041/758	9041/770	9041/782	9041/794
	60 / 150		800				7,8	1100	9041/759	9041/771	9041/783	9041/795

Performance table: suction height 0,75 m, oil ISOVG32 (cSt 40°C), T_{amb} 20 °C

Size	Ø bore / Ø housing outside	Suction pipe	Speed (rpm)	Flow normal at 1500 rpm (dm ³ /min)	Power req. (Kw)		Weight (Kg)	Max speed (rpm)	With shaft seal in the cover (Pict. 7c) Code number			
					3 bar	10 bar			3 bar		10 bar	
									N	KSW	N	KSW
0	15 / 85	R ¼"	1500	6	0,25	0,37	2,0	2400	9041/796	9041/808	9041/820	9041/832
	30 / 100		1200				2,2	1900	9041/797	9041/809	9041/821	9041/833
	45 / 115		1000				2,6	1500	9041/798	9041/810	9041/822	9041/834
	60 / 130		800				3,2	1300	9041/799	9041/811	9041/823	9041/835
1	15 / 105	R ½ "	1500	15	0,37	0,55	3,2	1800	9041/800	9041/812	9041/824	9041/836
	30 / 120		1200				4,0	1500	9041/801	9041/813	9041/825	9041/837
	45 / 135		1000				5,1	1300	9041/802	9041/814	9041/826	9041/838
	60 / 150		800				6,3	1100	9041/803	9041/815	9041/827	9041/839
2	15 / 105	R ¾"	1500	24	0,55	0,75	4,1	1800	9041/804	9041/816	9041/828	9041/840
	30 / 120		1200				5,1	1500	9041/805	9041/817	9041/829	9041/841
	45 / 135		1000				6,5	1300	9041/806	9041/818	9041/830	9041/842
	60 / 150		800				7,8	1100	9041/807	9041/819	9041/831	9041/843

Performance table: suction height 0,75 m, oil ISOVG32 (cSt 40°C), T_{amb} 20 °C

Size	Ø bore / Ø housing outside	Suction pipe	Speed (rpm)	Flow normal at 1500 rpm (dm ³ /min)	Power req. (Kw)		Weight (Kg)	Max speed (rpm)	With shaft seal in the housing (Pict. 7d) Code number			
					3 bar	10 bar			3 bar		a 10 bar	
									N	KSW	N	KSW
0	15 / 85	R ¼"	1500	6	0,25	0,37	2,0	2400	9041/844	9041/856	9041/868	9041/880
	30 / 100		1200				2,2	1900	9041/845	9041/857	9041/869	9041/881
	45 / 115		1000				2,6	1500	9041/846	9041/858	9041/870	9041/882
	60 / 130		800				3,2	1300	9041/847	9041/859	9041/871	9041/883
1	15 / 105	R ½ "	1500	15	0,37	0,55	3,2	1800	9041/848	9041/860	9041/872	9041/884
	30 / 120		1200				4,0	1500	9041/849	9041/861	9041/873	9041/885
	45 / 135		1000				5,1	1300	9041/850	9041/862	9041/874	9041/886
	60 / 150		800				6,3	1100	9041/851	9041/863	9041/875	9041/887
2	15 / 105	R ¾"	1500	24	0,55	0,75	4,1	1800	9041/852	9041/864	9041/876	9041/888
	30 / 120		1200				5,1	1500	9041/853	9041/865	9041/877	9041/889
	45 / 135		1000				6,5	1300	9041/854	9041/866	9041/878	9041/890
	60 / 150		800				7,8	1100	9041/855	9041/867	9041/879	9041/891

Performance table: suction height 0,75 m, oil ISOVG32 (cSt 40°C), T_{amb} 20 °C

										With shaft seal in the cover and in the housing (Pict. 7e) Code number			
Size	Ø bore / Ø housing outside	Suction pipe	Speed (rpm)	Flow normal at 1500 rpm (dm ³ /min)	Power req. (Kw)		Weight (Kg)	Max speed (rpm)	3 bar		10 bar		
					3 bar	10 bar			N	KSW	N	KSW	
0	15 / 85	R ¼"	1500	6	0,25	0,37	2,0	2400	9041/892	9041/904	9041/916	9041/928	
	30 / 100		1200				2,2	1900	9041/893	9041/905	9041/917	9041/929	
	45 / 115		1000				2,6	1500	9041/894	9041/906	9041/918	9041/930	
	60 / 130		800				3,2	1300	9041/895	9041/907	9041/919	9041/931	
1	15 / 105	R ½"	1500	15	0,37	0,55	3,2	1800	9041/896	9041/908	9041/920	9041/932	
	30 / 120		1200				4,0	1500	9041/897	9041/909	9041/921	9041/933	
	45 / 135		1000				5,1	1300	9041/898	9041/910	9041/922	9041/934	
	60 / 150		800				6,3	1100	9041/899	9041/911	9041/923	9041/935	
2	15 / 105	R ¾"	1500	24	0,55	0,75	4,1	1800	9041/900	9041/912	9041/924	9041/936	
	30 / 120		1200				5,1	1500	9041/901	9041/913	9041/925	9041/937	
	45 / 135		1000				6,5	1300	9041/902	9041/914	9041/926	9041/938	
	60 / 150		800				7,8	1100	9041/903	9041/915	9041/927	9041/939	

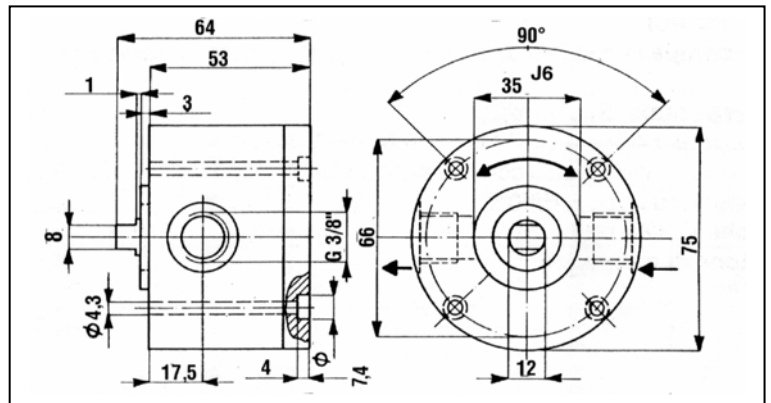
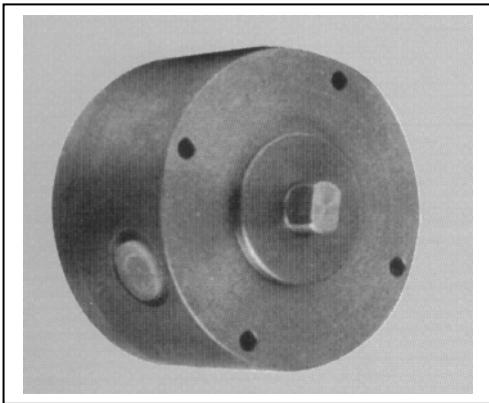
5. Pumps for multi spindle nose lubrication

- **according to DIN 69001, Part 17, Form A**
- **type KSW:** for changing direction of rotation with constant direction of flow, without reversing valve
- **flow rate with oil ISOVG32 (cSt 40°C):**
 - 6 dm³/min at 1500...2000 rpm
 - 2 dm³/min at 500 rpm
 - 0,5 dm³/min at 200 rpm
- **speed:** 200...2000 rpm
- **pressure:** 3 bar
- **max. suction height:** 1000 mm
- **code number:** 9041/505

6. Pumps with compact dimensions

• 6.1 Pumps PC75, type KSW, for external mounting

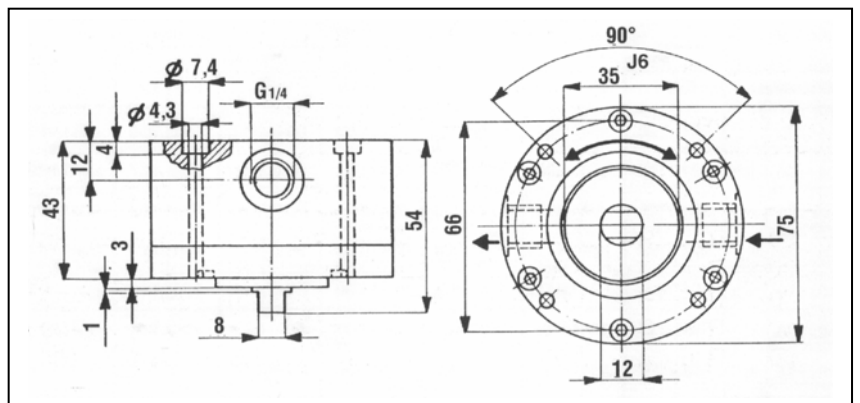
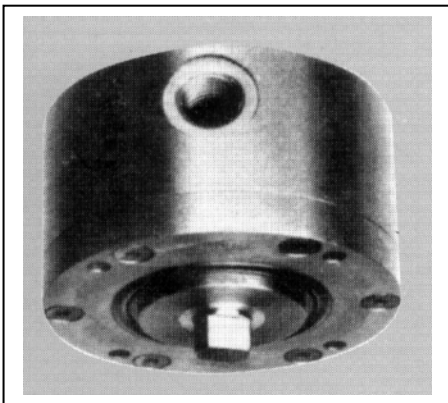
- **type KSW:** for changing direction of rotation with constant direction of flow, without reversing valve
- **flow rate with oil ISOVG32 (cSt 40°C):** max. 4 dm³/min
- **pressure:** 3 bar
- **speed:** 50....1500 rpm
- **connection pipe:** 3/8" G
- **suction height:** up to 1300 mm at 1500 rpm with oil ISOVG32 (cSt 40°C), depending upon number of revolutions and oil viscosity
- **mounting:** horizontally and vertically mounted pump shaft "upward" or shaft "downward" but with suction height = 0
- **code number:** 9041/446



Remark: with special bearings for 10 bar, dimension K is cover side ca. 10 mm longer

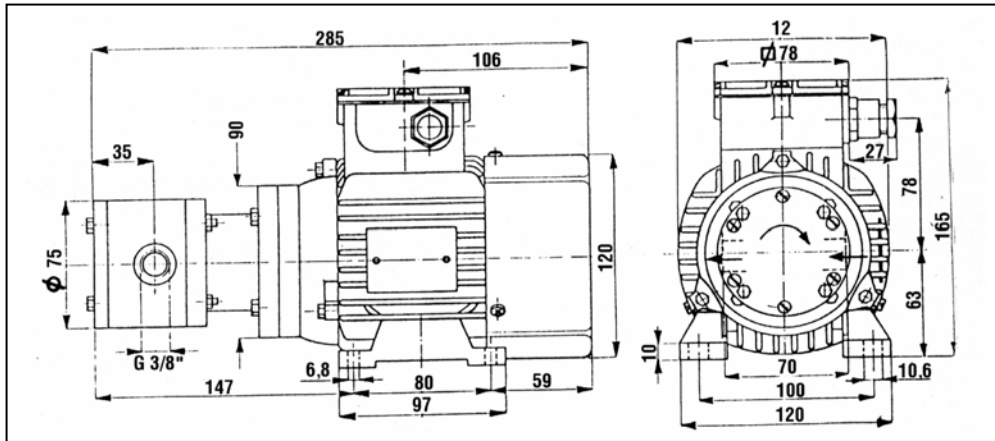
• 6.2 Pump PC75-V, type KSW, for vertical and internal mounting

- **type KSW:** for changing direction of rotation with constant direction of flow, without reversing valve
- **flow rate with oil ISOVG32 (cSt 40°C):** max. 3,5 dm³/min
- **pressure:** 2 bar
- **speed:** 50....1500 rpm
- **connection pipe:** 1/4" G
- **suction height:** up to 1300 mm at 1500 rpm with oil ISOVG32 (cSt 40°C), depending upon number of revolutions and oil viscosity
- **mounting:** horizontally and vertically mounted pump shaft "downward" or shaft "upward" but with suction height = 0
- **code number:** 9041/448



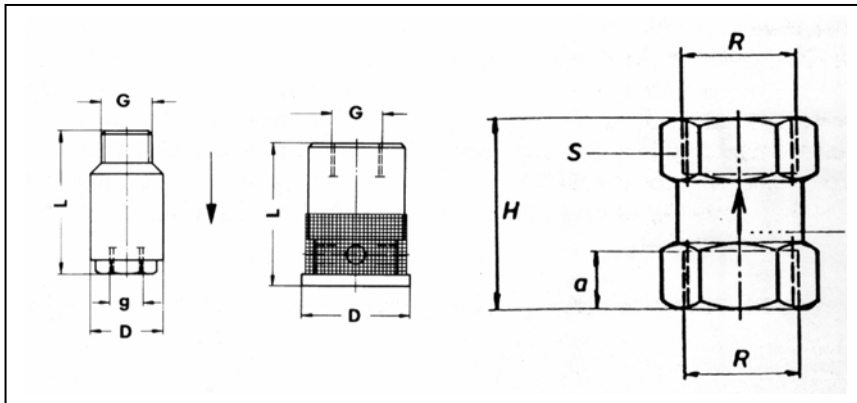
Remark: with special bearings for 10 bar, dimension K is cover side ca. 10 mm longer

• 6.3 Pump PC75/M with motor



- self priming motorized pump, without valves, fixed direction of rotation
- flow rate with oil ISOVG32 (cSt 40°C): max. 4 dm³/min, decreasing with oil viscosity
- pressure: 3 bar
- oil: max viscosity 8°E/50°C
- connection pipe: 3/8" G
- suction height: up to 1300 mm at 1500 rpm with oil ISOVG32 (cSt 40°C), depending upon number of revolutions and oil viscosity
- mounting: in any position
- motor: three phase, 4 poles, Gr.3, 0,18 kW, form B3/B14, 220/380 V, 50 Hz
- leakage oil bore: when mounting must be at the lowest point
- code number: 9041/439

7. Valves



These valves are required according to operating conditions i.e. with low number of revolutions or high suction heights and for limitation of the pressure.

Size of valves and connection threads correspond to sizes of pumps.

Pressure relief valves

Size	D	G	g	L
0	30	R 1/4"	R 1/4"	60
1	30	R 1/2"	R 1/4"	60
2	30	R 3/4"	R 1/4"	60
3	50	R 1"	R 1/2"	100
4	50	R 1 1/4"	R 3/4"	100

Suction foot valves

Size	D	G	L
0	45	R 1/4"	60
1	45	R 1/2"	60
2	45	R 3/4"	60
3	65	R 1"	100
4	65	R 1 1/4"	100

Suction non-return valves

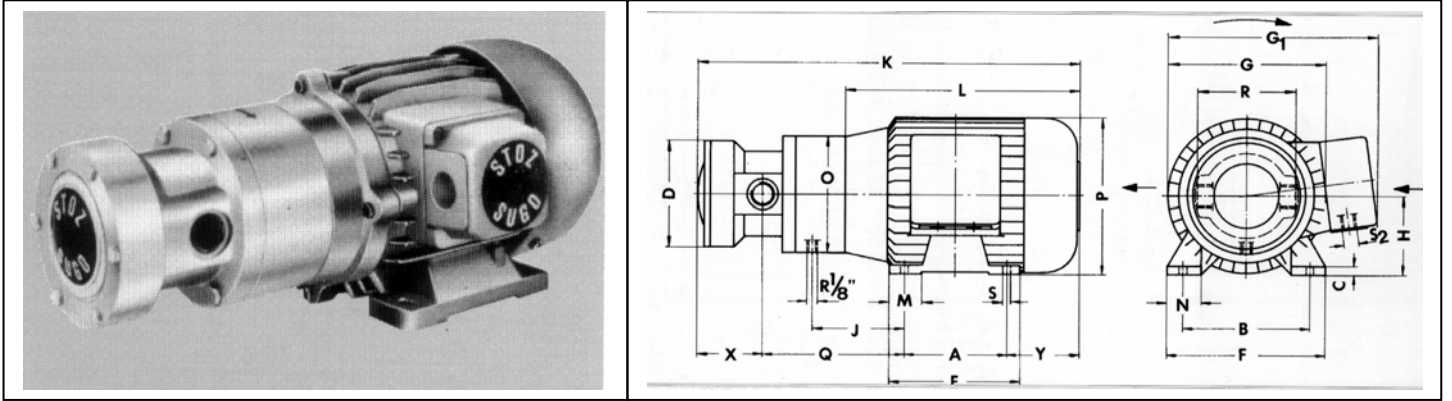
Size	a	S	R	H
0	9	22	R 1/4"	38
1	11	26	R 1/2"	41
2	12	30	R 3/4"	42
3	13	37	R 1"	47
4	14	47	R 1 1/4"	55

Size	Code
0	9041/520
1	9041/521
2	9041/522
3	9041/523
4	9041/524

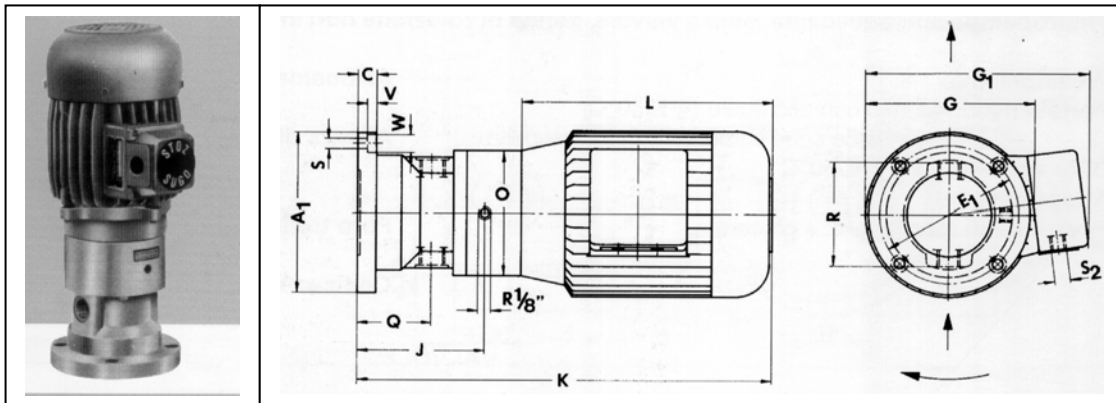
Size	Code
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1	9041/531
2	9041/532
3	9041/533
4	9041/534

Size	Code
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1	9041/541
2	9041/542
3	9041/543
4	9041/544

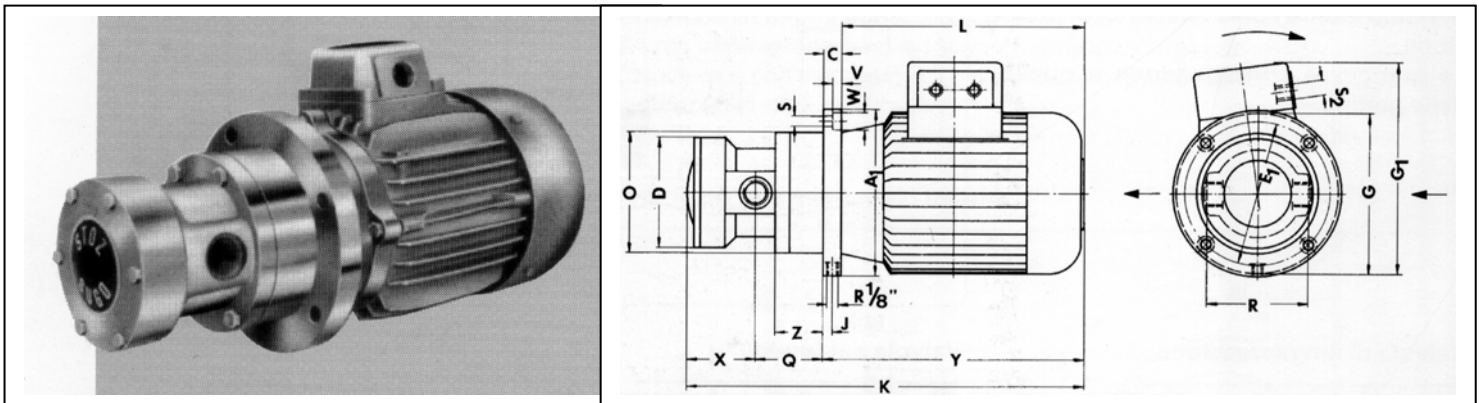
8. Motorized pumps type EF



Type EF-N



Type EF-A



Type EF-V

- 6 different sizes and 3 designs provide a range of delivery from 1 to 100 dm³/min
- **drive:** via flexible coupling
- **direction of rotation:** marked by red arrows
- **direction of flow:** marked by S + D (must not be changed)
- **mounting:** in any position, with vertical configuration, pump must be below
- **leakage oil bore (1/8" G, marked by adhesive label):** when mounting must be at the lowest point

Performance table: suction height 0,75 m, oil ISOVG32 (cSt 40°C), T_{amb} 20 °C *

Code 9041/	/549	/553	/557	/550	/554	/558	/551	/555	/559	/552	/556	/560	/575	/576	/577	/580	/581	/582
Type	N-00	A-00	V-00	N-0	A-0	V-0	N-1	A-1	V-1	N-2	A-2	V-2	N-3	A-3	V-3	N-4	A-4	V-4
Suction and pressure connection	R ¼"			R ¼"			R ½"			R ¾"			R 1"			R 1 ¼"		
Nominal flow dm ³ /min	6			6			15			24			50			100		
Reduced flow (on request)	1-5			1-5			9-14			18-22			30-45			55-90		
Power req (kW)	0,18			0,25			0,37			0,55			1,1			2,2		
Current (A) consumption (380 V, 50 Hz)	0,5			0,8			1,1			1,55			2,8			4,9		
rpm	1500			1500			1500			1500			1500			1500		
Weight (kg)	7			11			13			16			24			50		

Dimension																			
A, A ₁	71	115	145	90	115	145	90	135	145	100	135	160	100	160	180	140	180	210	
B	90			112			112			125			140			160			
C	8,5	16	16	9	16	16	9	16	16	10	16	16	10	16	16	12	26	20	
D	78		78	78		78	95		95	95		95	117		117	120		120	
E, E ₁	90	95	125	115	95	125	115	115	125	125	115	140	130	140	160	175	150	185	
F	110			138			138			156			170			197			
G		110			143			143			160			178			198		
G ₁		147			183			183			199			228			252		
H	56			71			71			80			90			100			
J	61	86	8	75	86	8	59	120	8	80	116	8	87	163	8	103	211	10	
K	273	279	273	311	323	317	331	341	337	369	379	375	438	437	438			556	
L		168		201	207	207	201	207	207	227	233	233		242				305	
M	25			28			28			30			32			40			
N	23			30			30			35			35			40			
O		105			105			105			120			140			160		
P	111			141			141			159			179			199			
Q	101	46	49	115	46	54	118	61	57	128	68	62	173	77	101	230	85	147	
R		72			72			88			87			108				109	
S	6	9,5	9,5	7	9,5	9,5	7	9,5	9,5	9	9,5	9,5	9	9,5	9,5	11,5	11	11	
S ₂		1 x Pg9			2 x Pg11			2 x Pg11			2 x Pg11			2 x Pg16			2 x Pg16		
V		8	8		8	8		8	8		8	8		8	8		11	11	
W		14,5	14,5		14,5	14,5		14,5	14,5		14,5	14,5		14,5	14,5		18,5	18,5	
X	40		40	40		40	57		57	64		64	78		78	84		84	
Y	61		184	66		223	66		223	77		249	87		259	102		325	
Z			33			38			39			39			58			72	

*** Performance table also referring to:**

- tubes with inside diameter according to BSP tube thread
- standard type with 220-225/380-440 V, 50 Hz, 220-280/380-480 V, 60 Hz
- "Bauknecht" motor: with other makes of motors the non standardised dimensions may vary slightly

Standard motor characteristic:

- 220-225/380-440 V, 50 Hz, 220-280/380-480 V, 60 Hz
- safe voltage variations ± 5%
- tropical insulation protection IP54
- isolation F

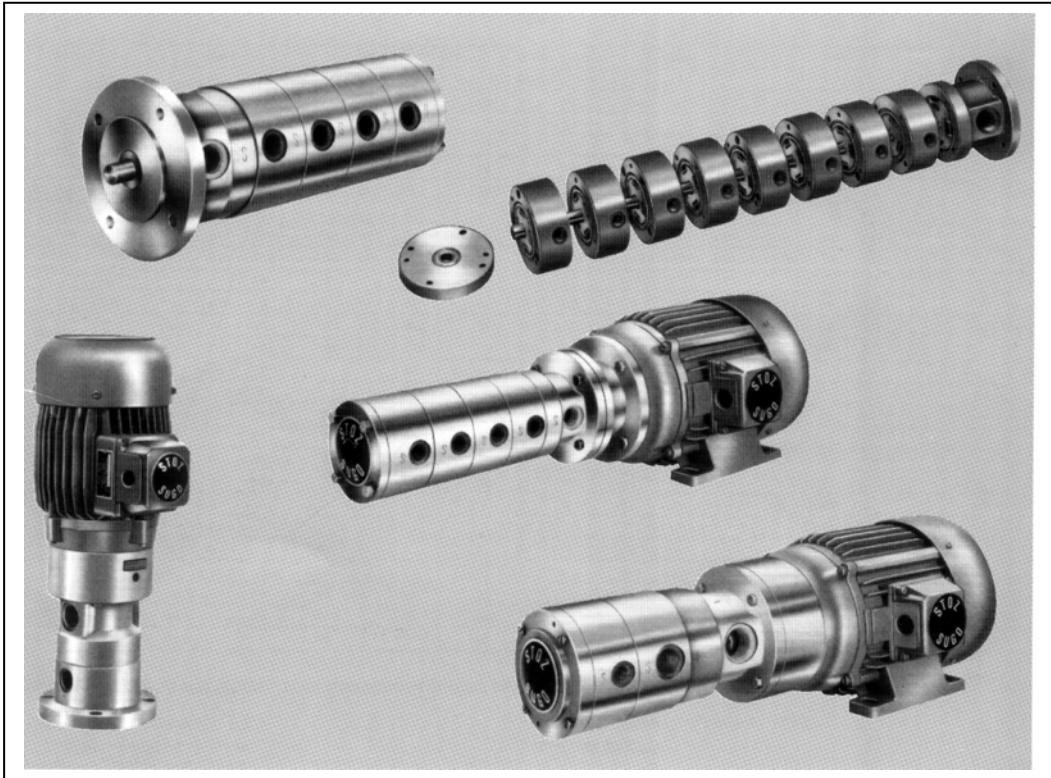
Special motor:

- all usual voltages to CSA regulation
- explosion proof up to ignition group T4
- airtight enclosed also for single phase alternating current or direct current
- reinforced motor: for oil viscosity from ISOVG100 (cSt 40°C) and pressure > 3 bar

Remark:

- please state in all cases when ordering or enquiring, operating data or particular operating conditions such as different oil viscosity, higher pressure, ambient or oil temperature and, for example if machine vibrations are present or likely

9. Multicircuit pumps



- combination of flange and shaft mounted annular pumps
- single lubrication points can be supplied independently from each other with equal or differing quantities required and pressure
- delivery flows of the single pumps can be designed from 1 to 50 dm³/min
- direction of flow can be carried out differently: possible combination of delivery and suction pump
- when using oils of different viscosity the single pumps are sealed between each other
- supplied with or without driving motors
- the performance data lie within the range of single pumps

Standard motor characteristic:

- 220-225/380-440 V, 50 Hz, 220-280/380-480 V, 60 Hz
- safe voltage variations $\pm 5\%$
- tropical insulation protection IP54
- isolation F

Special motor:

- all usual voltages to CSA regulation
 - explosion proof up to ignition group T4
 - airtight enclosed also for single phase alternating current or direct current
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