



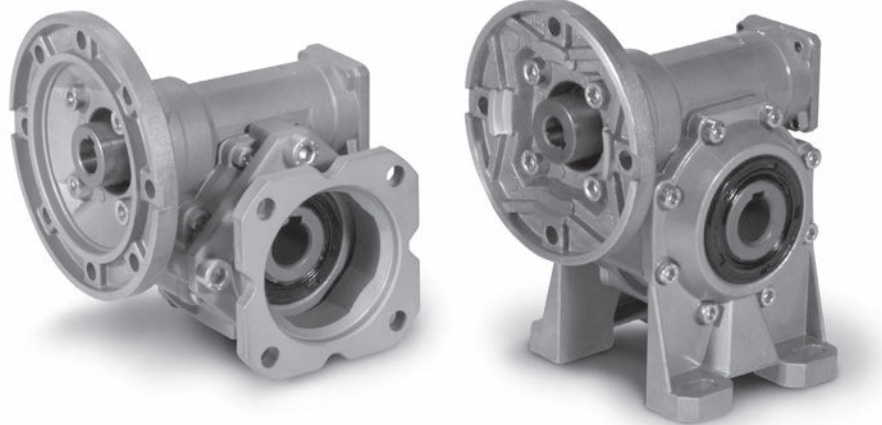
2

RIDUTTORI A VITE SENZA FINE SFK-SRK

SFK-SRK WORM GEARBOXES

SCHNECKENGETRIEBE SFK-SRK

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2.1 Caratteristiche

I riduttori della serie a vite senza fine SFK - SRK si presentano estremamente leggeri grazie alla forma compatta e la carcassa realizzata in alluminio pressofuso. La serie presenta una svariata possibilità di versioni, con e senza piedi e con numerosi accessori che la rendono più versatile nell'impiego delle più svariate tipologie di applicazioni. La vite senza fine è in acciaio legato cementato-temprato ed è rettificata. La corona ha mozzo in ghisa con riporto di fusione in bronzo.

2.1 Characteristics

The SFK - SRK worm gearboxes are extremely light thanks to the compact shape of the housing made of cast aluminium. This series features a wide range of versions, with and without feet, with numerous accessories which make it extremely versatile for utilization in various applications. The worm shaft is ground and is made of hardened-casehardened compound steel. The worm wheel features a cast iron hub with bronze casting.

2.1 Merkmale

Die Schneckengetriebe der SFK - SRK Serie sind äußerst leicht dank der kompakten Form des Gehäuses aus Aluminiumguss. Die Serie bietet verschiedene Versionen mit und ohne Füße sowie zahlreiche Zubehörteile an, was zur vielseitigen Anwendbarkeit der Getriebe in vielerlei Applikationen dient. Die Schneckenwelle ist aus legierten gehärteten Einsatzstahl und ist geschliffen. Der Zahnkranz verfügt über eine Nabe aus Gusseisen mit Schmelzeinsatz aus Bronze.

2.2 Designazione

2.2 Designation

2.2 Bezeichnung

Riduttore Gearbox Getriebe	Grandezza Size Größe	Versione Version Ausführung	Rapporto rid. Ratio Untersetzung	Predispos.att. mot. Motor coupling Motoranschluss	Posizione di mont. Mounting position Einbaulage	Limitatore di coppia. Torque limiter Drehmomentbegrenzer	Seconda entrata Additional input Zusatzantrieb	Albero uscita Output shaft Abtriebswelle	Braccio di reazione Torque arm Drehmomentstütze
SFK	50	FS	10	80 B14	B3	LD	SeA	H	BR2
 SFK SRK	30 40 50 63 75	A B V P F...S F...D	5 7.5 10 15 20 25 30 40 50 65 80 100	56 ÷ 112 B5 56 ÷ 112 B14	B3 B6 B7 B8 V5 V6	LS LD	SeA	H SD SS DD	BR1 BR2

Versioni

Versions

Ausführungen

SFK..A_
SRK..A_

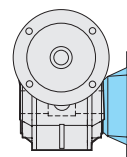
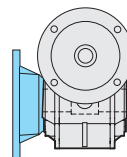
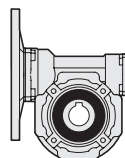
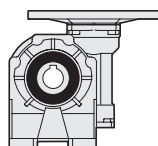
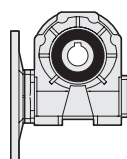
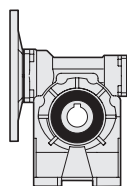
SFK..B_
SRK..B_

SFK..V_
SRK..V_

SFK..P_
SRK..P_

SFK..F_S
SRK..F_S

SFK..F_D
SRK..F_D



Specificare sempre in fase di ordinazione la versione.

Specify the version when ordering.

Bei der Bestellung immer die Bauform angeben.



2.3 Lubrificazione

Riduttori a vite senza fine SFK - SRK sono forniti tutti e sempre completi di lubrificante sintetico a base PAG con classe di viscosità ISO 320. Nei corpi in alluminio 30, 40, 50, 63, 75 è presente un solo tappo di riempimento olio.

Quantità di lubrificante (litri)

2.3 Lubrication

SFK - SRK worm gearboxes are supplied with PAG synthetic lubricant featuring an ISO 320 viscosity class. Aluminium housings size 30, 40, 50, 63 and 75 have one filling plug only.

Lubricant quantity (liters)

SFK SRK	B3	B6-B7	B8	V5-V6
30		0.015		
40		0.040		
50		0.080		
63		0.160		
75		0.260		

2.3 Schmierung

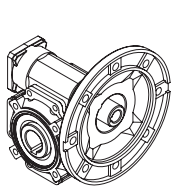
SFK - SRK Schneckengetriebe werden mit PAG synthetischen Schmierstoff Viskositätsklasse ISO 320 geliefert. Gehäuse aus Aluminium Größe 30, 40, 50, 63 und 75 verfügen nur über eine Einfüllschraube.

Schmiermittelmenge (Liter)

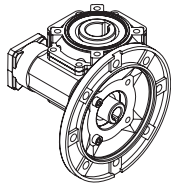
Posizioni di montaggio

Mounting positions

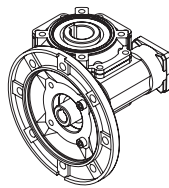
Bezeichnung



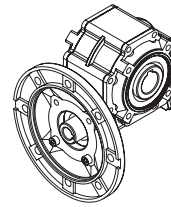
B3



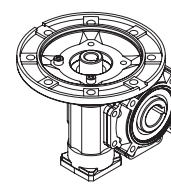
B6



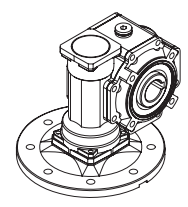
B7



B8



V5

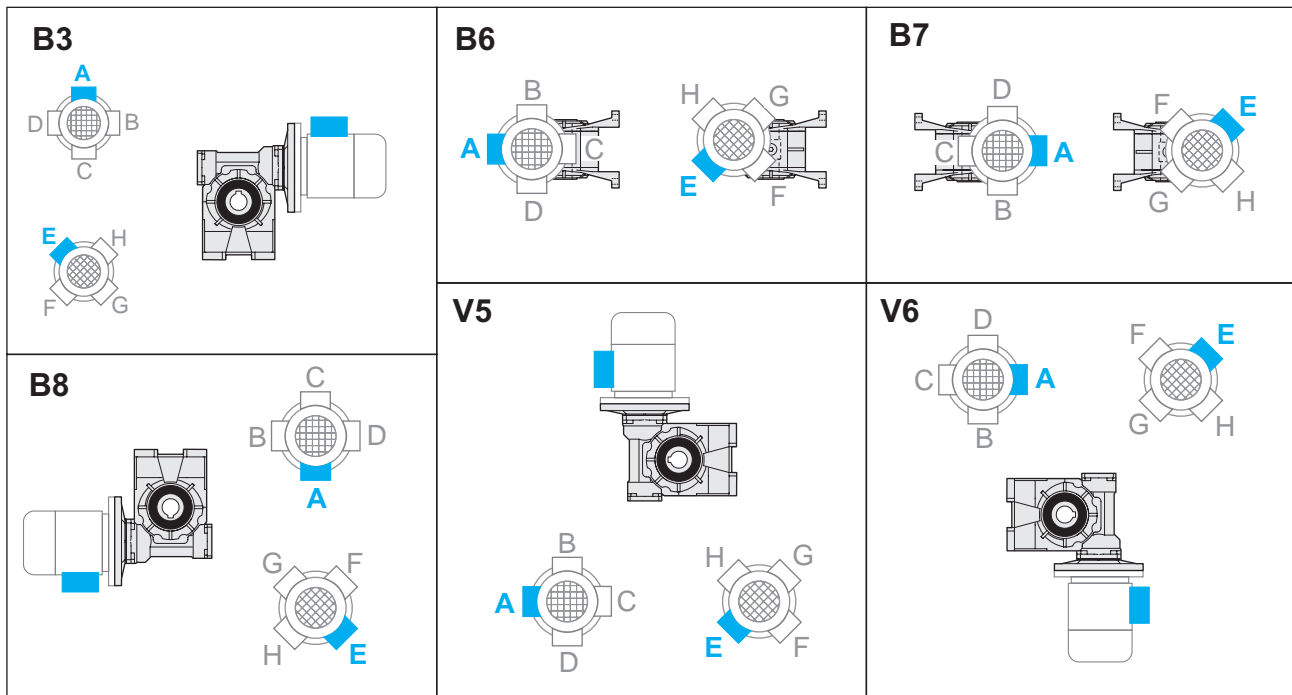


V6

2.4 Posizione morsettiera

2.4 Terminal board position

2.4 Lage des Klemmkasten



2.5 Dati tecnici
2.5 Technical data
2.5 Technische Daten

30	$n_1 = 2800$		SFK				SRK				
	i_n	n_2 [min ⁻¹]	T_2 [Nm]	P_1 [kW]	FS'	input IEC		T_{2M} [Nm]	P [kW]	R_d	P_{10}
						B5	B14				
Kg 1.2	5	560	5.6	0.37	2.5	63	56	14	0.92	0.89	—
	7.5	373	8	0.37	2.0			16	0.72	0.86	—
	10	280	11	0.37	1.5			16	0.56	0.84	—
	15	187	15	0.37	1.1			17	0.41	0.81	—
	20	140	13	0.25	1.2			15	0.29	0.76	—
	25	112	16	0.25	1.0			16	0.25	0.74	—
	30	93	13	0.18	1.0	56	13	0.18	0.71	—	
	40	70	16	0.18	1.0		16	0.18	0.65	—	
	50	56	14	0.13	1.1		15	0.14	0.62	—	
	65	43	17	0.13	1.0		17	0.13	0.57	—	
	80	35	13	0.09	1.0		13	0.09	0.54	—	
	100	28	16	0.09	0.8		12	0.07	0.52	—	

30	$n_1 = 1400$		SFK				SRK				
	i_n	n_2 [min ⁻¹]	T_2 [Nm]	P_1 [kW]	FS'	input IEC		T_{2M} [Nm]	P [kW]	R_d	P_{10}
						B5	B14				
Kg 1.2	5	280	6.5	0.22	2.9	63	56	19	0.64	0.87	0.40
	7.5	187	9	0.22	2.2			21	0.49	0.84	0.40
	10	140	12	0.22	1.8			22	0.40	0.82	0.40
	15	93	17	0.22	1.3			22	0.28	0.77	0.30
	20	70	18	0.18	1.1			19	0.19	0.72	0.20
	25	56	15	0.13	1.1			21	0.18	0.69	0.20
	30	47	18	0.13	1.4	20	0.15	0.66	0.20		
	40	35	14	0.09	1.4	21	0.13	0.59	0.20		
	50	28	17	0.09	1.1	19	0.10	0.55	0.20		
	65	22	14	0.06	1.3	20	0.09	0.51	0.10		
	80	18	16	0.06	1.1	17	0.06	0.48	0.10		
	100	14	18	0.06	0.8	14	0.05	0.45	0.10		

30	$n_1 = 900$		SFK				SRK				
	i_n	n_2 [min ⁻¹]	T_2 [Nm]	P_1 [kW]	FS'	input IEC		T_{2M} [Nm]	P [kW]	R_d	P_{10}
						B5	B14				
Kg 1.2	5	180	5.9	0.13	3.9	63	56	23	0.51	0.85	—
	7.5	120	9	0.13	2.9			25	0.38	0.82	—
	10	90	11	0.13	2.3			25	0.30	0.80	—
	15	60	15	0.13	1.6			25	0.21	0.75	—
	20	45	19	0.13	1.2			22	0.15	0.69	—
	25	36	23	0.13	1.1			24	0.14	0.66	—
	30	30	18	0.09	1.2	21	0.10	0.63	—		
	40	23	21	0.09	1.1	24	0.10	0.55	—		
	50	18	16	0.06	1.3	21	0.08	0.52	—		
	65	14	20	0.06	1.1	22	0.07	0.48	—		
	80	11	11	0.03	1.7	19	0.05	0.44	—		
	100	9	13	0.03	1.1	15	0.03	0.42	—		

30	$n_1 = 500$		SFK				SRK				
	i_n	n_2 [min ⁻¹]	T_2 [Nm]	P_1 [kW]	FS'	input IEC		T_{2M} [Nm]	P [kW]	R_d	P_{10}
						B5	B14				
Kg 1.2	5	100	—	—	—	63	56	29	0.36	0.83	—
	7.5	67	—	—	—			31	0.27	0.80	—
	10	50	—	—	—			31	0.21	0.77	—
	15	33	—	—	—			31	0.15	0.72	—
	20	25	—	—	—			26	0.10	0.66	—
	25	20	—	—	—			27	0.09	0.62	—
	30	17	—	—	—	25	0.07	0.59	—		
	40	13	—	—	—	28	0.07	0.51	—		
	50	10	—	—	—	25	0.06	0.48	—		
	65	8	—	—	—	25	0.05	0.43	—		
	80	6	—	—	—	20	0.03	0.40	—		
	100	5	—	—	—	16	0.02	0.38	—		

* **ATTENZIONE:** la coppia massima utilizzabile $[T_{2M}]$ deve essere calcolata utilizzando il fattore di servizio: $T_{2M} = T_2 \times FS'$

* **WARNING:** Maximum allowable torque $[T_{2M}]$ must be calculated using the following service factor: $T_{2M} = T_2 \times FS'$

* **ACHTUNG:** das max. anwendbare Drehmoment $[T_{2M}]$ muss mit folgendem Betriebsfaktor berechnet werden: $T_{2M} = T_2 \times FS'$



2.5 Dati tecnici

2.5 Technical data

2.5 Technische Daten

40	$n_1 = 2800$		SFK				SRK				
	i_n	n_2 [min ⁻¹]	T_2 [Nm]	P_1 [kW]	FS'	input IEC		T_{2M} [Nm]	P [kW]	R_d	P_{10}
						B5	B14				
Kg 2.0	5	560	11.3	0.75	2.2	71 63		25	1.67	0.88	—
	7.5	373	17	0.75	1.8			30	1.3	0.87	—
	10	280	22	0.75	1.4			31	1.1	0.86	—
	15	187	32	0.75	1.0			32	0.76	0.82	—
	20	140	30	0.55	1.0			31	0.57	0.80	—
	25	112	24	0.37	1.1			27	0.41	0.76	—
	30	93	28	0.37	1.3	35	0.47	0.73	—		
	40	70	24	0.25	1.4	33	0.35	0.70	—		
	50	56	28	0.25	1.1	30	0.27	0.65	—		
	65	43	24	0.18	1.2	63	28	0.21	0.61	—	
	80	35	21	0.13	1.3	56	26	0.16	0.58	—	
	100	28	24	0.13	1.0		25	0.13	0.55	—	

40	$n_1 = 1400$		SFK				SRK				
	i_n	n_2 [min ⁻¹]	T_2 [Nm]	P_1 [kW]	FS'	input IEC		T_{2M} [Nm]	P [kW]	R_d	P_{10}
						B5	B14				
Kg 2.0	5	280	16.3	0.55	2.1	71 63		34	1.14	0.87	0.80
	7.5	187	24	0.55	1.7			40	0.92	0.85	0.80
	10	140	31	0.55	1.3			41	0.73	0.83	0.70
	15	93	30	0.37	1.4			42	0.52	0.79	0.50
	20	70	38	0.37	1.0			40	0.39	0.76	0.50
	25	56	31	0.25	1.1			35	0.29	0.72	0.40
	30	47	35	0.25	1.3	41	0.29	0.68	0.40		
	40	35	38	0.22	1.1	38	0.22	0.64	0.30		
	50	28	36	0.18	1.0	38	0.19	0.59	0.30		
	65	22	31	0.13	1.1	63	35	0.15	0.54	0.20	
	80	18	31	0.11	1.1	56	33	0.12	0.52	0.20	
	100	14	30	0.09	0.9		28	0.08	0.49	0.20	

40	$n_1 = 900$		SFK				SRK				
	i_n	n_2 [min ⁻¹]	T_2 [Nm]	P_1 [kW]	FS'	input IEC		T_{2M} [Nm]	P [kW]	R_d	P_{10}
						B5	B14				
Kg 2.0	5	180	16.7	0.37	2.5	71 63		42	0.93	0.85	—
	7.5	120	25	0.37	2.0			48	0.72	0.83	—
	10	90	32	0.37	1.5			48	0.56	0.81	—
	15	60	45	0.37	1.1			49	0.40	0.76	—
	20	45	39	0.25	1.2			46	0.29	0.74	—
	25	36	33	0.18	1.3			42	0.23	0.69	—
	30	30	37	0.18	1.3	48	0.23	0.65	—		
	40	23	33	0.13	1.3	42	0.16	0.61	—		
	50	18	38	0.13	1.1	42	0.14	0.55	—		
	65	14	32	0.09	1.2	63	39	0.11	0.51	—	
	80	11	37	0.09	1.0	56	37	0.09	0.48	—	
	100	9	29	0.06	1.0		30	0.06	0.45	—	

40	$n_1 = 500$		SFK				SRK				
	i_n	n_2 [min ⁻¹]	T_2 [Nm]	P_1 [kW]	FS'	input IEC		T_{2M} [Nm]	P [kW]	R_d	P_{10}
						B5	B14				
Kg 2.0	5	100	7.1	0.09	7.1	71 63		51	0.64	0.83	—
	7.5	67	10	0.09	5.5			58	0.50	0.81	—
	10	50	14	0.09	4.4			59	0.39	0.79	—
	15	33	19	0.09	3.1			59	0.28	0.73	—
	20	25	24	0.09	2.3			55	0.20	0.70	—
	25	20	28	0.09	1.7			48	0.15	0.65	—
	30	17	31	0.09	1.8	58	0.17	0.61	—		
	40	13	39	0.09	1.3	52	0.12	0.57	—		
	50	10	44	0.09	1.2	51	0.11	0.51	—		
	65	8	52	0.09	0.9	63	45	0.08	0.46	—	
	80	6	61*	0.09	0.7*	56	42	0.06	0.44	—	
	100	5	71*	0.09	0.4*		32	0.04	0.41	—	

* **ATTENZIONE:** la coppia massima utilizzabile $[T_{2M}]$ deve essere calcolata utilizzando il fattore di servizio: $T_{2M} = T_2 \times FS'$

* **WARNING:** Maximum allowable torque $[T_{2M}]$ must be calculated using the following service factor: $T_{2M} = T_2 \times FS'$

* **ACHTUNG:** das max. anwendbare Drehmoment $[T_{2M}]$ muss mit folgendem Betriebsfaktor berechnet werden: $T_{2M} = T_2 \times FS'$

2.5 Dati tecnici
2.5 Technical data
2.5 Technische Daten

50	$n_1 = 2800$		SFK				SRK				
	i_n	n_2 [min ⁻¹]	T_2 [Nm]	P_1 [kW]	FS'	input IEC		T_{2M} [Nm]	P [kW]	R_d	P_{10}
						B5	B14				
 3.4	5	560	22.8	1.5	1.9	80	71	44	2.9	0.89	—
	7.5	373	34	1.5	1.5			51	2.3	0.88	—
	10	280	44	1.5	1.2			54	1.8	0.86	—
	15	187	47	1.1	1.2			57	1.3	0.84	—
	20	140	42	0.75	1.4			58	1.0	0.81	—
	25	112	50	0.75	1.0			50	0.75	0.78	—
	30	93	42	0.55	1.3	55	0.71	0.75	—		
	40	70	54	0.55	1.0	80-71-63		54	0.63	0.72	—
	50	56	43	0.37	1.3	71	63	56	0.48	0.68	—
	65	43	53	0.37	1.0			53	0.37	0.64	—
	80	35	41	0.25	1.2			48	0.29	0.61	—
	100	28	35	0.18	1.3			45	0.23	0.58	—

50	$n_1 = 1400$		SFK				SRK				
	i_n	n_2 [min ⁻¹]	T_2 [Nm]	P_1 [kW]	FS'	input IEC		T_{2M} [Nm]	P [kW]	R_d	P_{10}
						B5	B14				
 3.4	5	280	26.7	0.9	2.3	80	71	62	2.1	0.87	1.2
	7.5	187	40	0.9	1.8			70	1.6	0.86	1.2
	10	140	52	0.9	1.4			73	1.3	0.84	1.0
	15	93	61	0.75	1.2			74	0.90	0.80	0.80
	20	70	59	0.55	1.3			75	0.71	0.78	0.70
	25	56	47	0.37	1.4			65	0.51	0.74	0.60
	30	47	54	0.37	1.5	66	0.46	0.71	0.60		
	40	35	68	0.37	1.2	80-71-63		69	0.38	0.67	0.50
	50	28	53	0.25	1.3	71	63	70	0.33	0.62	0.40
	65	22	64	0.25	1.0			64	0.25	0.58	0.40
	80	18	53	0.18	1.1			60	0.20	0.54	0.40
	100	14	45	0.13	1.2			55	0.16	0.51	0.30

50	$n_1 = 900$		SFK				SRK				
	i_n	n_2 [min ⁻¹]	T_2 [Nm]	P_1 [kW]	FS'	input IEC		T_{2M} [Nm]	P [kW]	R_d	P_{10}
						B5	B14				
 3.4	5	180	33.8	0.75	2.2	80	71	75	1.66	0.85	—
	7.5	120	50	0.75	1.6			83	1.23	0.84	—
	10	90	66	0.75	1.3			86	0.98	0.82	—
	15	60	68	0.55	1.3			88	0.71	0.78	—
	20	45	59	0.37	1.5			87	0.54	0.75	—
	25	36	70	0.37	1.1			75	0.40	0.71	—
	30	30	79	0.37	1.0	79	0.37	0.67	—		
	40	23	67	0.25	1.1	80-71-63		75	0.28	0.63	—
	50	18	78	0.25	1.0	71	63	80	0.26	0.59	—
	65	14	67	0.18	1.1			74	0.20	0.54	—
	80	11	56	0.13	1.2			67	0.16	0.51	—
	100	9	45	0.09	1.3			58	0.12	0.47	—

50	$n_1 = 500$		SFK				SRK				
	i_n	n_2 [min ⁻¹]	T_2 [Nm]	P_1 [kW]	FS'	input IEC		T_{2M} [Nm]	P [kW]	R_d	P_{10}
						B5	B14				
 3.4	5	100	14.3	0.18	6.4	80	71	92	1.15	0.84	—
	7.5	67	21	0.18	4.7			100	0.85	0.82	—
	10	50	28	0.18	3.8			104	0.68	0.80	—
	15	33	39	0.18	2.7			106	0.49	0.75	—
	20	25	50	0.18	2.1			104	0.38	0.72	—
	25	20	58	0.18	1.5			88	0.27	0.68	—
	30	17	65	0.18	1.5	98	0.27	0.63	—		
	40	13	81	0.18	1.2	80-71-63		95	0.21	0.59	—
	50	10	93	0.18	1.0	71	63	94	0.18	0.54	—
	65	8	56	0.09	1.5			86	0.14	0.50	—
	80	6	63	0.09	1.2			77	0.11	0.46	—
	100	5	74	0.09	0.8			61	0.07	0.43	—

* **ATTENZIONE:** la coppia massima utilizzabile $[T_{2M}]$ deve essere calcolata utilizzando il fattore di servizio: $T_{2M} = T_2 \times FS'$

* **WARNING:** Maximum allowable torque $[T_{2M}]$ must be calculated using the following service factor: $T_{2M} = T_2 \times FS'$

* **ACHTUNG:** das max. anwendbare Drehmoment $[T_{2M}]$ muss mit folgendem Betriebsfaktor berechnet werden: $T_{2M} = T_2 \times FS'$



2.5 Dati tecnici

2.5 Technical data

2.5 Technische Daten

63	$n_1 = 2800$		SFK				SRK				
	i_n	n_2 [min ⁻¹]	T_2 [Nm]	P_1 [kW]	FS'	input IEC		T_{2M} [Nm]	P [kW]	R_d	P_{10}
						B5	B14				
Kg 6.3	5	560	45.5	3	1.7	80	90	79	5.2	0.89	—
	7.5	373	68	3	1.3			88	3.9	0.88	—
	10	280	89	3	1.1			94	3.2	0.87	—
	15	187	95	2.2	1.0			98	2.3	0.84	—
	20	140	85	1.5	1.3			110	1.9	0.83	—
	25	112	76	1.1	1.2			93	1.4	0.81	—
	30	93	87	1.1	1.3			110	1.4	0.77	—
	40	70	111	1.1	1.1			117	1.2	0.74	—
	50	56	90	0.75	1.1	71	80	97	0.81	0.70	—
	65	43	81	0.55	1.2			98	0.66	0.67	—
	80	35	65	0.37	1.4			91	0.52	0.64	—
	100	28	75	0.37	1.1			83	0.41	0.60	—

63	$n_1 = 1400$		SFK				SRK				
	i_n	n_2 [min ⁻¹]	T_2 [Nm]	P_1 [kW]	FS'	input IEC		T_{2M} [Nm]	P [kW]	R_d	P_{10}
						B5	B14				
Kg 6.3	5	280	54	1.8	2.0	80	90	111	3.7	0.88	1.8
	7.5	187	80	1.8	1.5			120	2.7	0.87	1.8
	10	140	105	1.8	1.2			127	2.2	0.85	1.6
	15	93	125	1.5	1.1			130	1.6	0.81	1.2
	20	70	120	1.1	1.2			144	1.3	0.80	1.2
	25	56	118	0.9	1.0			118	0.90	0.77	1.0
	30	47	134	0.9	1.1			142	0.95	0.73	0.90
	40	35	142	0.75	1.1			150	0.79	0.69	0.80
	50	28	122	0.55	1.0	71	80	122	0.55	0.65	0.70
	65	22	100	0.37	1.2			122	0.45	0.61	0.60
	80	18	79	0.25	1.4			113	0.36	0.58	0.60
	100	14	91	0.25	1.1			102	0.28	0.53	0.50

63	$n_1 = 900$		SFK				SRK				
	i_n	n_2 [min ⁻¹]	T_2 [Nm]	P_1 [kW]	FS'	input IEC		T_{2M} [Nm]	P [kW]	R_d	P_{10}
						B5	B14				
Kg 6.3	5	180	69	1.5	1.9	80	90	135	2.9	0.87	—
	7.5	120	102	1.5	1.4			144	2.1	0.85	—
	10	90	133	1.5	1.1			150	1.7	0.83	—
	15	60	139	1.1	1.1			152	1.2	0.79	—
	20	45	123	0.75	1.4			167	1.0	0.77	—
	25	36	109	0.55	1.3			140	0.71	0.74	—
	30	30	122	0.55	1.3			164	0.74	0.70	—
	40	23	154	0.55	1.1			171	0.61	0.66	—
	50	18	120	0.37	1.2	71	80	141	0.44	0.61	—
	65	14	98	0.25	1.4			139	0.35	0.57	—
	80	11	115	0.25	1.1			128	0.28	0.54	—
	100	9	95	0.18	1.2			115	0.22	0.50	—

63	$n_1 = 500$		SFK				SRK				
	i_n	n_2 [min ⁻¹]	T_2 [Nm]	P_1 [kW]	FS'	input IEC		T_{2M} [Nm]	P [kW]	R_d	P_{10}
						B5	B14				
Kg 6.3	5	100	20	0.25	8.3	80	90	169	2.08	0.85	—
	7.5	67	30	0.25	5.9			177	1.5	0.83	—
	10	50	39	0.25	4.7			182	1.2	0.81	—
	15	33	55	0.25	3.4			184	0.84	0.76	—
	20	25	71	0.25	2.8			200	0.70	0.74	—
	25	20	85	0.25	1.9			165	0.49	0.71	—
	30	17	94	0.25	2.1			195	0.52	0.65	—
	40	13	118	0.25	1.7			201	0.43	0.62	—
	50	10	135	0.25	1.2	71	80	165	0.31	0.56	—
	65	8	163	0.25	1.0			161	0.25	0.52	—
	80	6	137	0.18	1.1			148	0.19	0.50	—
	100	5	77	0.09	1.6			122	0.14	0.45	—

* **ATTENZIONE:** la coppia massima utilizzabile $[T_{2M}]$ deve essere calcolata utilizzando il fattore di servizio: $T_{2M} = T_2 \times FS'$

* **WARNING:** Maximum allowable torque $[T_{2M}]$ must be calculated using the following service factor: $T_{2M} = T_2 \times FS'$

* **ACHTUNG:** das max. anwendbare Drehmoment $[T_{2M}]$ muss mit folgendem Betriebsfaktor berechnet werden: $T_{2M} = T_2 \times FS'$

2.5 Dati tecnici

2.5 Technical data

2.5 Technische Daten

75	$n_1 = 2800$		SFK				SRK					
	i_n	n_2 [min ⁻¹]	T_2 [Nm]	P_1 [kW]	FS'	input IEC		T_{2M} [Nm]	P [kW]	Rd	P_{10}	
						B5	B14					
Kg 7.6	7.5	373	125	5.5	1.0	90		131	5.8	0.89	—	
	10	280	120	4	1.2			143	4.8	0.88	—	
	15	187	131	3	1.2			100	152	3.5	0.85	—
	20	140	171	3	1.0			112	172	3.0	0.84	—
	25	112	154	2.2	1.0			155	2.2	0.82	—	
	30	93	120	1.5	1.4	71(B5)-80-90-100-112		170	2.1	0.78	—	
	40	70	154	1.5	1.2	80		183	1.8	0.75	—	
	50	56	136	1.1	1.2			90	166	1.3	0.73	—
	65	43	114	0.75	1.4	71	80 90	155	1.0	0.69	—	
	80	35	135	0.75	1.1	80		145	0.80	0.66	—	
100	28	159	0.75	0.8	90	131		0.62	0.62	—		

75	$n_1 = 1400$		SFK				SRK					
	i_n	n_2 [min ⁻¹]	T_2 [Nm]	P_1 [kW]	FS'	input IEC		T_{2M} [Nm]	P [kW]	Rd	P_{10}	
						B5	B14					
Kg 7.6	7.5	187	178	4	1.0	90		180	4.0	0.87	2.5	
	10	140	176	3	1.1			193	3.3	0.86	2.3	
	15	93	187	2.2	1.1			100	202	2.4	0.83	1.9
	20	70	199	1.8	1.1			112	226	2.0	0.81	1.7
	25	56	200	1.5	1.0			202	1.5	0.78	1.5	
	30	47	167	1.1	1.3	71(B5)-80-90-100-112		220	1.5	0.74	1.2	
	40	35	213	1.1	1.1	80		235	1.2	0.71	1.1	
	50	28	206	0.9	1.0			90	211	0.92	0.67	1.0
	65	22	154	0.55	1.3	71	80 90	195	0.70	0.63	0.90	
	80	18	180	0.55	1.0	80		182	0.55	0.60	0.80	
100	14	210	0.55	0.8	90	182		0.43	0.56	0.70		

75	$n_1 = 900$		SFK				SRK					
	i_n	n_2 [min ⁻¹]	T_2 [Nm]	P_1 [kW]	FS'	input IEC		T_{2M} [Nm]	P [kW]	Rd	P_{10}	
						B5	B14					
Kg 7.6	7.5	120	205	3	1.0	90		215	3.1	0.86	—	
	10	90	197	2.2	1.2			229	2.6	0.84	—	
	15	60	231	1.8	1.0			100	237	1.9	0.81	—
	20	45	250	1.5	1.1			112	263	1.6	0.78	—
	25	36	221	1.1	1.1			233	1.2	0.76	—	
	30	30	249	1.1	1.0	71(B5)-80-90-100-112		254	1.1	0.71	—	
	40	23	214	0.75	1.3	80		270	0.94	0.67	—	
	50	18	186	0.55	1.3			90	241	0.71	0.64	—
	65	14	151	0.37	1.5	71	80 90	221	0.54	0.59	—	
	80	11	177	0.37	1.2	80		205	0.43	0.56	—	
100	9	203	0.37	0.9	90	184		0.34	0.52	—		

75	$n_1 = 500$		SFK				SRK					
	i_n	n_2 [min ⁻¹]	T_2 [Nm]	P_1 [kW]	FS'	input IEC		T_{2M} [Nm]	P [kW]	Rd	P_{10}	
						B5	B14					
Kg 7.6	7.5	67	90	0.75	2.9	90		265	2.2	0.84	—	
	10	50	118	0.75	2.4			279	1.8	0.82	—	
	15	33	167	0.75	1.7			100	286	1.3	0.78	—
	20	25	216	0.75	1.5			112	315	1.1	0.75	—
	25	20	260	0.75	1.1			278	0.80	0.72	—	
	30	17	288	0.75	1.1	71(B5)-80-90-100-112		302	0.79	0.67	—	
	40	13	265	0.55	1.2	80		317	0.66	0.63	—	
	50	10	210	0.37	1.3			90	282	0.50	0.59	—
	65	8	251	0.37	1.0	71	80 90	257	0.38	0.55	—	
	80	6	197	0.25	1.2	80		238	0.30	0.52	—	
100	5	161	0.18	1.3	90	206		0.23	0.47	—		

* **ATTENZIONE:** la coppia massima utilizzabile $[T_{2M}]$ deve essere calcolata utilizzando il fattore di servizio: $T_{2M} = T_2 \times FS'$

* **WARNING:** Maximum allowable torque $[T_{2M}]$ must be calculated using the following service factor: $T_{2M} = T_2 \times FS'$

* **ACHTUNG:** das max. anwendbare Drehmoment $[T_{2M}]$ muss mit folgendem Betriebsfaktor berechnet werden: $T_{2M} = T_2 \times FS'$



2.6 **Momenti d'inerzia [Kg·cm²]**
(riferiti all'albero veloce in entrata)

2.6 **Moments of inertia [Kg·cm²]**
(referred to input shaft)

2.6 **Trägheitsmoment [Kg·cm²]**
(bez. Antriebswelle)

30

i_n	SRK	SFK	
		B5 - B14	
		IEC 56	IEC 63
5	0.077	0.130	0.127
7.5	0.058	0.112	0.109
10	0.049	0.103	0.100
15	0.042	0.097	0.094
20	0.039	0.095	0.092
25	0.038	0.094	0.091
30	0.038	0.093	0.090
40	0.037	0.093	0.090
50	0.037	0.092	0.089
65	0.024	0.079	-
80	0.024	0.079	-
100	0.024	0.078	-

40

i_n	SRK	SFK		
		B5 - B14		
		IEC 56	IEC 63	IEC 71
5	0.242	-	0.391	0.463
7.5	0.170	-	0.321	0.356
10	0.144	-	0.272	0.347
15	0.125	-	0.266	0.340
20	0.094	-	0.263	0.338
25	0.091	-	0.262	0.337
30	0.113	-	0.262	0.337
40	0.087	-	0.261	0.337
50	0.087	0.182	0.261	-
65	0.069	0.182	0.261	-
80	0.069	0.182	0.261	-
100	0.068	0.182	0.261	-

50

i_n	SRK	SFK		
		B5 - B14		
		IEC 63	IEC 71	IEC 80
5	0.744	-	0.922	1.046
7.5	0.499	-	0.684	0.935
10	0.417	-	0.602	0.853
15	0.358	-	0.543	0.794
20	0.281	-	0.523	0.774
25	0.272	-	0.513	0.764
30	0.323	-	0.508	0.759
40	0.262	0.311	0.503	0.755
50	0.183	0.311	0.501	-
65	0.136	0.311	0.499	-
80	0.136	0.310	0.498	-
100	0.135	0.309	0.498	-

63

i_n	SRK	SFK		
		B5 - B14		
		IEC 71	IEC 80	IEC 90
5	1.853	-	2.431	2.671
7.5	1.363	-	1.949	2.269
10	1.158	-	1.744	2.063
15	1.011	-	1.597	1.916
20	0.710	-	1.545	1.864
25	0.679	-	1.514	1.833
30	0.922	-	1.508	1.828
40	0.660	0.958	1.495	-
50	0.653	0.958	1.488	-
65	0.552	0.955	1.484	-
80	0.550	0.953	1.482	-
100	0.549	0.952	1.481	-

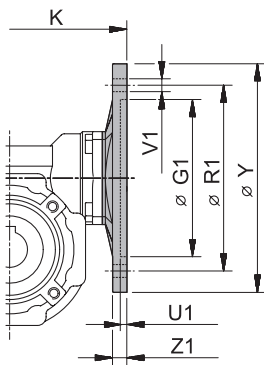
75

i_n	SRK	SFK			
		B5 - B14			
		IEC 71	IEC 80	IEC 90	IEC 100-112
7.5	2.970	-	-	3.712	4.462
10	2.492	-	-	3.234	3.984
15	2.151	-	-	2.893	3.643
20	1.567	-	-	2.774	3.523
25	1.501	-	-	2.709	3.458
30	1.946	1.615	1.575	2.689	3.438
40	1.451	-	1.573	2.659	-
50	1.435	-	1.570	2.642	-
65	1.158	1.609	1.569	2.633	-
80	1.153	1.605	1.565	2.629	-
100	1.150	1.602	1.562	2.626	-

2.7 Predisposizioni possibili

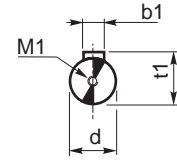
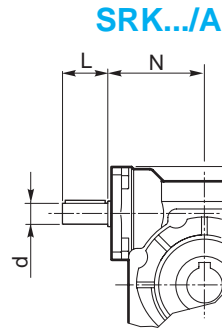
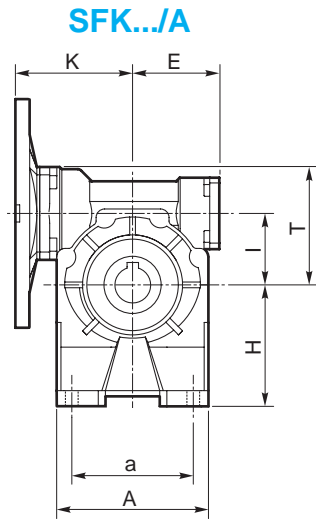
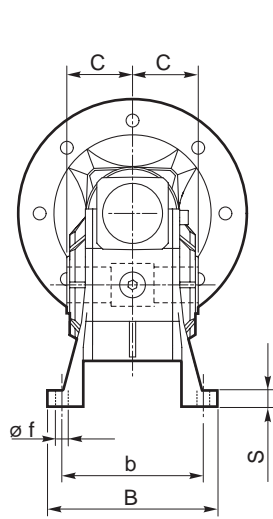
2.7 Possible set-ups

2.7 Mögliche Vorrichtungen

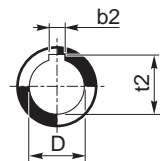
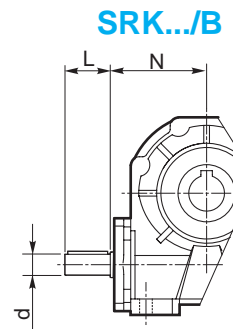
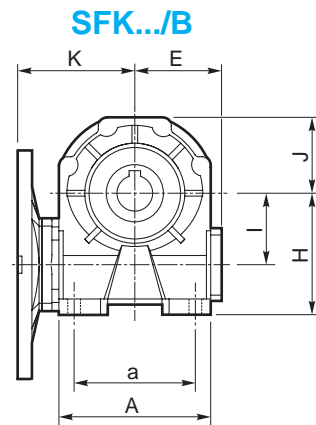
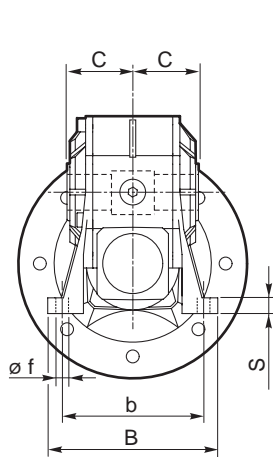


SFK	PAM IEC	G ₁	K	R ₁	U ₁	V1			Y	Z ₁	Diametro fori PAM / Holes diameter IEC-Input Bohrungsdurchmesser IEC-Antrieb																			
						∅					5	7.5	10	15	20	25	30	40	50	65	80	100								
30	56 B5	80	57	100	4	7	n° 8		120	8	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9		
	56 B14	50		65	3.5	6	n° 8		80	8	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	
	63 B5	95		115	4	9	n° 8		140	8	11	11	11	11	11	11	11	11	11	11	11	11	11	11	/	/	/	/	/	
	63 B14	60		75	4	6	n° 8		90	8	11	11	11	11	11	11	11	11	11	11	11	11	11	11	/	/	/	/	/	/
40	56 B5	80	75	100	4	7	n° 8		120	9	/	/	/	/	/	/	/	/	/	/	/	9	9	9	9	9	9	9		
	56 B14	50		65	3.5	6		n° 4	80	8	/	/	/	/	/	/	/	/	/	/	/	/	9	9	9	9	9	9	9	
	63 B5	95		115	4	9	n° 8		140	9	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	
	63 B14	60		75	3.5	6		n° 4	90	8	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	
	71 B5	110		130	4.5	9	n° 8		160	10	14	14	14	14	14	14	14	14	14	14	14	14	/	/	/	/	/	/	/	/
	71 B14	70		85	3.5	7	n° 8		105	8	14	14	14	14	14	14	14	14	14	14	14	14	/	/	/	/	/	/	/	/
50	63 B5	95	82	115	4	9	n° 8		140	9	/	/	/	/	/	/	/	/	/	/	11	11	11	11	11	11	11	11		
	63 B14	60		75	3.5	6		n° 4	90	8	/	/	/	/	/	/	/	/	/	/	/	11	11	11	11	11	11	11	11	
	71 B5	110		130	4.5	9	n° 8		160	10	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	
	71 B14	70		85	3.5	7	(n° 8)*	n° 4	105	8	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	
	80 B5	130		165	4.5	11	n° 8		200	10	19	19	19	19	19	19	19	19	19	19	19	19	/	/	/	/	/	/	/	
	80 B14	80		100	4	7	n° 8		120	10	19	19	19	19	19	19	19	19	19	19	19	19	/	/	/	/	/	/	/	/
63	71 B5	110	97	130	4.5	9	n° 8		160	10	/	/	/	/	/	/	/	/	/	/	14	14	14	14	14	14	14	14		
	71 B14	70		85	3.5	7		n° 4	105	10	/	/	/	/	/	/	/	/	/	/	/	14	14	14	14	14	14	14	14	
	80 B5	130		165	4.5	11	n° 8		200	10	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	
	80 B14	80		100	4	7		n° 4	120	10	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	
	90 B5	130		165	4.5	11	n° 8		200	10	24	24	24	24	24	24	24	24	24	24	24	24	/	/	/	/	/	/	/	
	90 B14	95		115	4	8.5	n° 8		140	10	24	24	24	24	24	24	24	24	24	24	24	24	/	/	/	/	/	/	/	
75	71 B5	110	114	130	4.5	9	n° 8		160	10	/	/	/	/	/	/	/	/	/	/	14	/	/	14	14	14	14	14		
	80 B5	130		165	4.5	11	n° 8		200	10	/	/	/	/	/	/	/	/	/	/	19	19	19	19	19	19	19	19		
	80 B14	80		100	4	7		n° 4	120	11	/	/	/	/	/	/	/	/	/	/	19	19	19	19	19	19	19	19		
	90 B5	130		165	4.5	11	n° 8		200	10	/	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	
	90 B14	95		115	4	9		n° 4	140	11	/	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	
	100/112 B5	180		215	5	14	n° 8		250	13	/	28	28	28	28	28	28	28	28	28	28	28	/	/	/	/	/	/	/	
100 B14	110	130	4.5	9	n° 8		160	11	/	28	28	28	28	28	28	28	28	28	28	28	/	/	/	/	/	/	/			

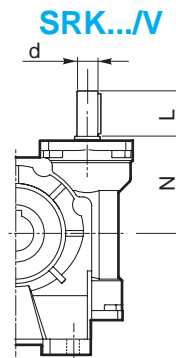
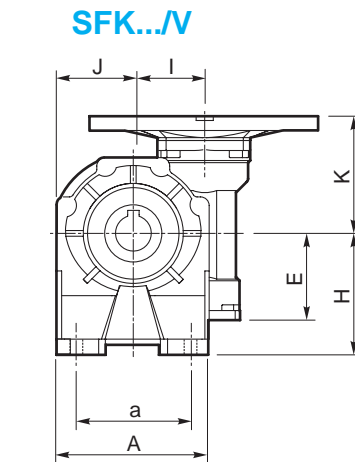
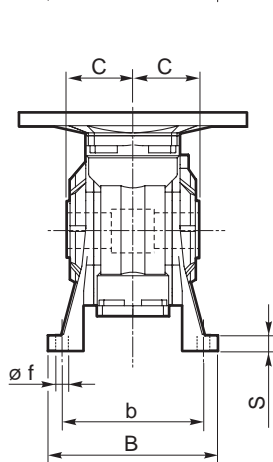
* A richiesta, solo con corpo speciale / Upon request, only with special body / Auf Wunsch nur mit speziellen Körper



SRK	Albero entrata Input shaft Eingangswelle			
	d (j6)	b1	t1	M1
30	9	3	10.2	M4x10
40	11	4	12.5	M4x10
50	14	5	16	M5x13
63	18	6	20.5	M6x16
75	19	6	21.5	M6x16

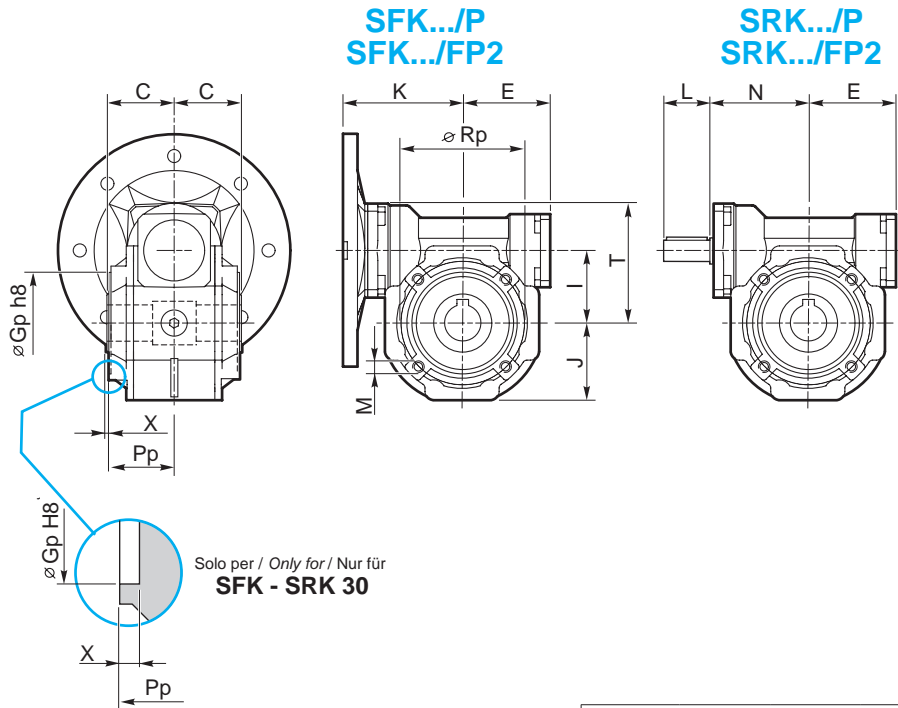


SFK SRK	Albero lento cavo Hollow output shaft Ausgangshohlwelle		
	D H8	b2	t2
30	14	5	16.3
40	19	6	21.8
50	24	8	27.3
63	25	8	28.3
75	28 (30)	8 (8)	31.3 (33.3)

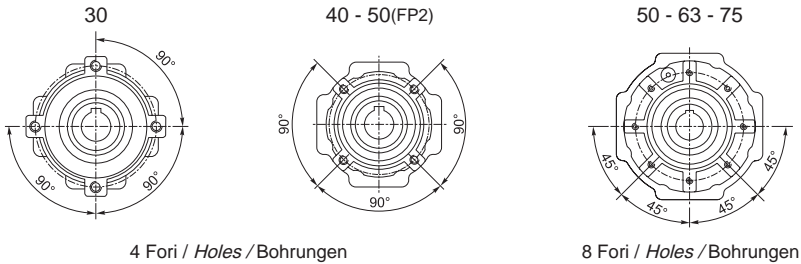


A, B, V

SFK SRK	A	a	B	b	C	E	f	H	I	J	K	L	N	s	T
30	67	52 ÷ 40	78	66	31.5	41	6.5	52	31.5	37.5	57	20	47	5	52.5
40	87	70	100	80 ÷ 88	41	51	7	71	40	43.5	75	22	64	9	68.5
50	115	85	119	96 ÷ 102	49	60	9	85	50	53.5	82	30	74	11	82.5
63	127.5	95	136	111	60	71	11	100	63	64	97	45	80	12	100.5
75	155.5	120	140	112 ÷ 120	60	85	11	115	75	78	114	40	98	12	116.5



Flangia pendolare / Side cover for shaft mounting / Flansch für Drehmomentstütze



4 Fori / Holes / Bohrungen

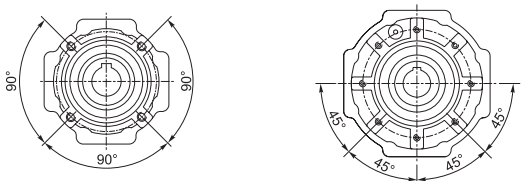
8 Fori / Holes / Bohrungen

P					
SFK SRK	30	40	50	63	75
G_p	42° H8	60 h8	70 h8	70 h8	80 h8
M	M6x8	M6X10	M8x10	M8x14	M8x14
P_p	36	38	46	57.5	57
R_p	56	83	85	85	100
X	5.5	2	2	3.5	2

* Vedere dettaglio (SFK - SRK 30/P)
Pls refer to above detail (SFK - SRK 30/P)
Siehe o.g. Einzelheit (SFK - SRK 30/P)

FP2					
SFK SRK	30	40	50	63	75
G_p h8	—	50 h8	60 h8	—	—
M	—	M6X8.5	M6X9	—	—
P_p	—	38	46	—	—
R_p	—	65	75	—	—
X	—	2	2	—	—

Flangia pendolare speciale / Side special cover for shaft mounting / Flansch für Drehmomentstütze nötig.



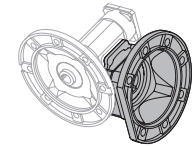
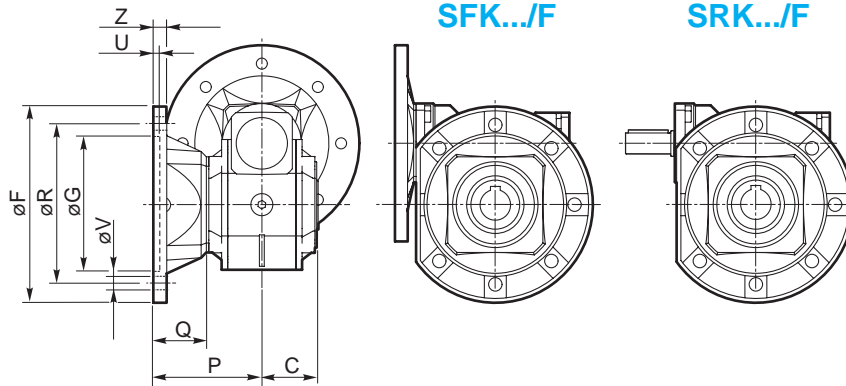
4 Fori / Holes / Bohrungen
Solo per / Only for / Nur für
SFK - SRK 40 / F1
SFK - SRK 40 / F2

8 Fori / Holes / Bohrungen
Solo per / Only for / Nur für
SFK - SRK 63 / F..
SFK - SRK 75 / F..

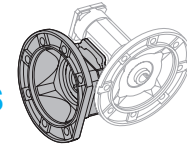
SFK SRK	40	63	75
G_p h8	50 h8	75	90
M	M6X8.5	M8x14	M8x14
P_p	38	45	46
R_p	65	90	110
X	2	10	13



Flangia uscita / Output flange / Abtriebsflansch

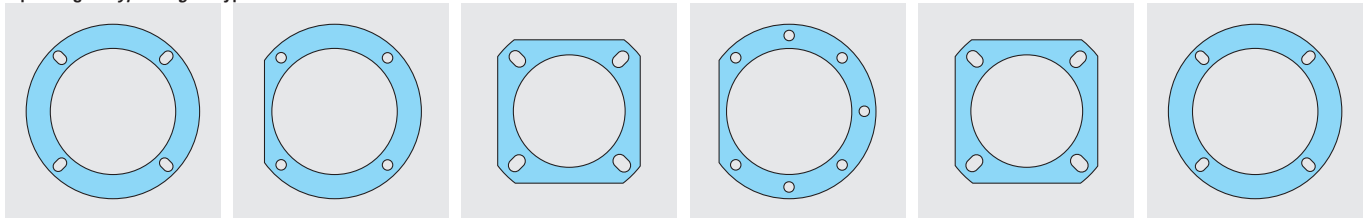


F...D
Standard

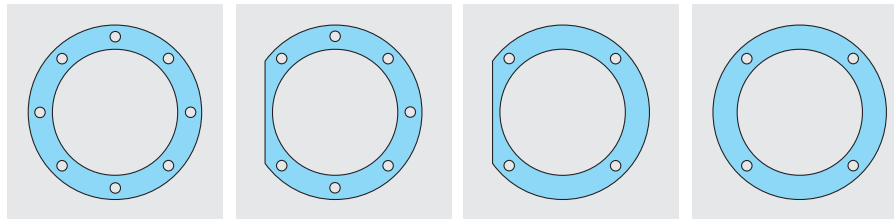


F...S

Tipo flangia / Type flange / Typ flansch



30		40			50	
F	F	F1* - F2*	F	F1	F2 - F3	



63	63	75	63	75	75
F*	F1*	F* - F1*	F2*	F2* - F3* F3A*	F4*

N.B.

La flangia uscita può essere montata solo sul riduttore in versione P.
Le flangie indicate con (*) necessitano di un coperchio speciale.

The output flange is to be mounted to the gearbox P version only.
A special cover is required for the flanges marked by (*).

Der Abtriebsflansch darf nur auf das Getriebe Version P montiert werden.
Für die Flansche mit (*) ausgezeichnet ist einen Sonderdeckel nötig.

SFK SRK	Tipo flangia Type flange Typ flansch	C	F		G (H8)	P	Q	R	U	V			Z
												ø	
30	F	31.5			40	50.5	19	56 ÷ 60	3			6.5	6
40	F	41			95	82	41	115	5			9	9
	F1*			85	60	68.5	27.5	75 ÷ 90	4			9	8
	F2*			85	60	98.5	57.5	75 ÷ 90	4			9	8
50	F	49			110	92	43	130	5			11	11
	F1			94	70	92.5	43.5	85 ÷ 100	5			11	10
	F2			125	70	73	24	90 ÷ 100	5			10.5	10
	F3			125	70	85	36	90	5			10.5	10
63	F*	60			115	116	56	150	7			11	12
	F1*			180	115	86	26	150	5			11	11
	F2*			200	130	102	42	165	6			11	11
75	F*	60			130	111	51	165	6			13	13
	F1*			200	130	85	25	165	6			13	13
	F2*			175	115	116	56	150	6			11	12
	F3*			175	115	85	25	150	5			11	12
	F3A*			160	110	85	25	130	5			11	12
	F4*			160	110	101	41	130	6			11	12

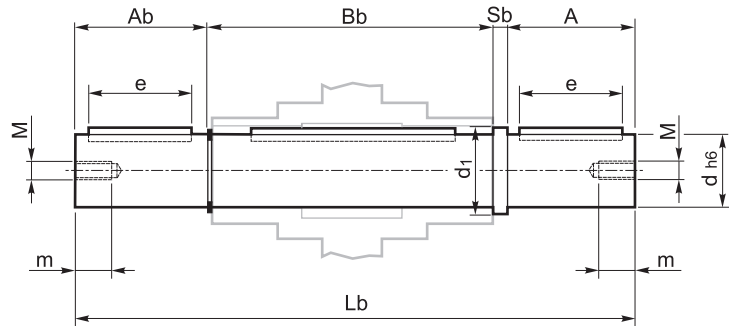
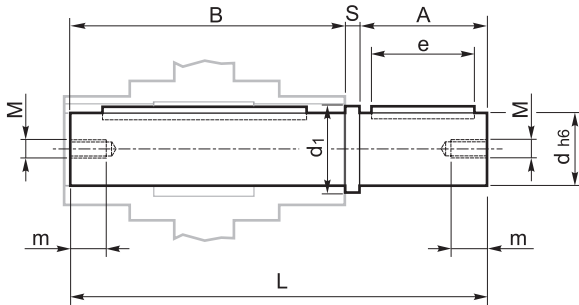
2.9 Accessori

2.10 Accessories

2.9 Zubehör

Albero lento semplice / *Single output shaft* / Standard Abtriebswelle

Albero lento doppio / *Double output shaft* / Doppelte Abtriebswelle



SFK SRK	A	Ab	B	Bb	d (h6)	d1	e	L	Lb	M	m	S	Sb
30	30	29	62	64	14	18.5	20	94.5	126	M6	16	2.5	2.5
40	40	39	77	83.2	19	24.5	30	120	165.2	M6	16	3	3
50	50	49	90	99.2	24	29.5	40	143.5	201.7	M8	22	3.5	3.5
63	60	59	119	121.2	25	29.5	50	183	244.2	M8	22	4	4
75	60	59	119	121.5	28	34.5	50	183	244.5	M8	22	4	4

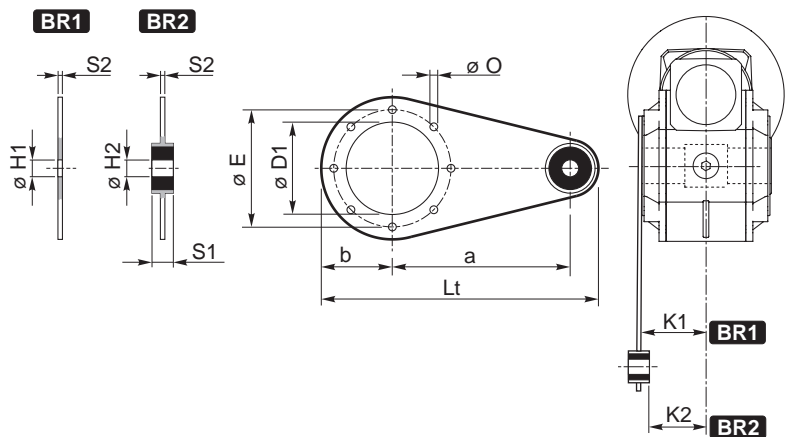
BR1 Senza boccola / *Without bush* / Ohne Büchse

SFK SRK	a	b	D1	E	H1	K1	Lt	O	S1	S2
30	70	34.5	42	56	9	36	119.5	7	—	4
40	90	50	60	83	10	38	165	7	—	4
50	100	55	70	85	10	46	180	9	—	4
63	150	53	70	85	10	57.5	230	9	—	6
75	—	—	—	—	—	—	—	—	—	—

BR2 Con boccola / *With bush* / Mit Büchse

SFK SRK	a	b	D1	E	H2	K2	Lt	O	S1	S2
30	—	—	—	—	—	—	—	—	—	—
40	90	50	60	83	8	33	165	7	14	4
50	100	50	70	85	10	40.5	180	9	14	4
63	150	53	70	85	10	50.5	230	9	20	6
75	150	62	80	100	10	50	240	9	20	6

Braccio di reazione / *Torque arm* / Drehmomentstütze

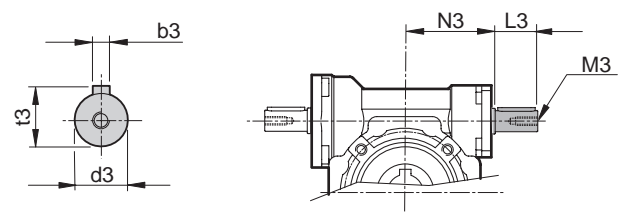
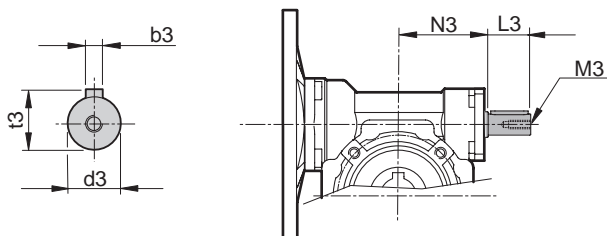


Entrata supplementare
(vite bisporgente)

Additional input
(double extended input shaft)

Zusatzantrieb
(beidseitige Welle)

S.e.A.



SFK	d3 (j6)	L3	M3	N3	b3	t3
30	9	15	M4x10	42.5	3	10.2
40	11	20	M4x12	52.5	4	12.5
50	14	25	M5x13	62.5	5	16
63	19	30	M8x20	72.5	6	21.5
75	24	40	M8x20	89	8	27

SRK	d3 (j6)	L3	M3	N3	b3	t3
30	9	20	M4x10	42.5	3	10.2
40	11	22	M4x10	52.5	4	12.5
50	14	30	M5x13	62.5	5	16
63	18	45	M6x16	72.5	6	20.5
75	19	40	M6x16	89	6	21.5

Opzioni disponibili:

Available options:

Auf Anfrage ist folgendes Zubehör
erhältlich:

Cuscinetti a rulli conici corona

Tapered roller bearing for worm wheel

Kegelrollenlager für Schneckenrad



2.10 Limitatore di coppia cavo passante

Il limitatore di coppia viene consigliato in tutte quelle applicazioni che richiedono una limitazione sulla coppia trasmissibile per proteggere l'impianto e/o preservare il riduttore evitando sovraccarichi o urti indesiderati quanto inaspettati.

È un dispositivo con albero dotato di cavo passante, con funzionamento a frizione, ed è integrato al riduttore, presentando un ingombro limitato.

Concepito per lavorare a bagno d'olio, il dispositivo risulta affidabile nel tempo ed è esente da usura se non viene mantenuto in condizioni prolungate di slittamento (condizione che si verifica quando la coppia presenta valori superiori a quelli di taratura).

La taratura è facilmente regolabile dall'esterno attraverso il serraggio di una ghiera autobloccante che porta a compressione le 4 molle a tazza disposte tra loro in serie.

Il dispositivo non consente:

- l'impiego di cuscinetti a rulli conici in uscita
- funzionamento prolungato in condizioni di slittamento.

Nella tabella seguente vengono riportati i valori delle coppie di slittamento M_{2S} in funzione del n° di giri della ghiera.

I valori di taratura presentano una tolleranza del $\pm 10\%$ e si riferiscono ad una condizione statica.

In condizioni dinamiche è da notare che la coppia di slittamento assume valori diversi a seconda del tipo e/o modalità in cui si verifica il sovraccarico: con valori maggiori in caso di carico uniformemente crescente rispetto a valori più contenuti in seguito al verificarsi di picchi improvvisi di carico.

NOTA: quando si supera il valore di taratura si ha slittamento. Il coefficiente di attrito tra le superfici di contatto da statico diventa dinamico e la coppia trasmessa cala del 30% circa.

E' quindi opportuno prevedere uno stop per poter ripartire al valore di taratura iniziale.

E' importante notare che la coppia di slittamento non resta sempre la medesima durante tutta la vita del limitatore.

Tende infatti a diminuire in rapporto al numero e alla durata degli slittamenti che, rodando le superfici di contatto, ne aumentano il rendimento.

È quindi opportuno verificare periodicamente, soprattutto durante la fase di rodaggio, la taratura del dispositivo.

Là dove sia richiesto un errore più contenuto nella taratura, è necessario testare la coppia trasmissibile sull'impianto.

Il dispositivo viene consegnato tarato alla coppia riportata a catalogo T_{2M} salvo diversa indicazione espressa in fase di ordinazione.

2.10 Torque limiter with through hollow shaft

The use of a torque limiter is advisable when the application requires the limitation of the transmissible torque to safeguard the plant and/or the gearbox from unexpected or undesired overloads.

The torque limiter is equipped with a through hollow shaft and a friction clutch. It is integrated in the gearbox, therefore space requirement is limited.

Designed to be working in oil bath, the device is reliable over time and is not subject to wear unless in case of operation with prolonged slipping (it occurs when the torque values are higher than the calibration values).

Calibration can be easily adjusted from outside by tightening of the self-locking ring nut, which causes the compression of the 4 Belleville washers arranged in series.

The device does not go together with:

- the use of tapered roller bearings at output
- prolonged operation under slipping conditions

The following table shows the values of M_{2S} slipping torques depending on the number of revolutions of the ring nut.

Calibration values feature a $\pm 10\%$ tolerance and refer to static conditions.

Under dynamic conditions the values of the slipping torque will change according to the type of overload: the values are higher if the load increase is uniform; the values are lower if sudden load peaks occur.

NOTE: *Slipping occurs when the setting values are exceeded.*

The friction coefficient between the contact surfaces from static becomes dynamic and the transmitted torque is approx. 30% lower.

It is advisable to have a stop first in order to have a restart based on the initial setting value.

It is important to note that the slipping torque is not the same for the whole life of the torque limiter.

It usually decreases in connection with the numbers and the duration of the slipping which because of the surfaces' lap- ping will increase the efficiency.

For this reason it is advisable to check the calibration of the device at regular intervals, specially during the running-in period.

Should a smaller calibration error be required, it is necessary to test the transmissible torque on the plant.

The device is supplied already calibrated at the torque reported in the catalogue T_{2M} , unless otherwise specified in the order.

2.10 Drehmomentenbegrenzer mit durchgehender Hohlwelle

Die Anwendung eines Drehmomentbegrenzers wird empfohlen, um die Anlage und/oder das Getriebe gegen ungewünschte und unerwartete Überbelastungen zu schützen.

Es handelt sich um eine Vorrichtung mit einer durchgehenden Hohlwelle.

Er ist in dem Getriebe integriert, d.h. der Raumbedarf ist klein. Der Begrenzer wurde für Betrieb in einem Ölbad entworfen.

Er ist zuverlässig und verschleißfrei (nur im Falle eines dauerhaften Rutschens entsteht Verschleiß, hier ist das Drehmoment größer als der eingestellte Eichwert).

Die Eichung kann mühelos von aussen durch das Anziehen einer selbstsperrenden Mutter ausgeführt werden, dadurch wird der Druck auf die 4 wechselseitig angeordneten Tellerfedern erhöht.

Die Vorrichtung sieht das folgende nicht vor:

- die Verwendung von Kegelrollenlager am Abtrieb
- Längerer Rutschbetrieb

Die nachstehende Tabelle zeigt die Werte der Rutschmomente M_{2S} abhängig von der Anzahl der Umdrehungen der Mutter.

Die Eichwerte weisen $\pm 10\%$ Toleranz auf und beziehen sich auf statische Bedingungen.

Unter dynamischen Bedingungen hat das Rutschmoment verschiedene Werte je nach Art der Überbelastung. Die Werte sind höher, wenn die Belastung gleichmäßig zunimmt; sie sind niedriger im Falle von plötzlichen Belastungsspitzen.

BEMERKUNG: Rutschen tritt auf, wenn die eingestellten Werte überschritten werden. Der Reibungskoeffizient zwischen den Berührungsf lächen wird dynamisch anstatt statisch und das übertragene Drehmoment sinkt um ca. 30%.

Es ist daher ratsam, vor dem erneuten Anfahren anzuhalten, um die ursprünglichen Drehmomentwerte zu erreichen.

Es ist wichtig zu beachten, dass das Rutschmoment über die gesamte Lebensdauer der Rutschkupplung nicht konstant bleibt, sondern üblicherweise in Verbindung mit längeren Rutschzyklen aufgrund der eingelaufenen Berührungsf lächen abnimmt.

Deswegen ist es ratsam, die Eichung der Vorrichtung besonders während der Einlaufzeit zu prüfen.

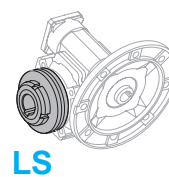
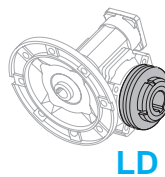
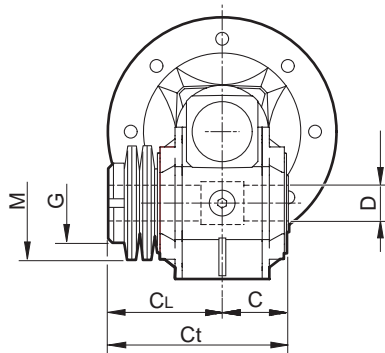
Falls ein niedrigerer Eichfehler gewünscht ist, sollte das übertragbare Drehmoment auf der Anlage getestet werden.

Wenn die Vorrichtung geliefert wird, ist sie schon auf das im Katalog T_{2M} angegebene Drehmoment geeicht, ausser wenn es in der Bestellung anders angegebene wird.

2.10 Limitatore di coppia cavo passante

2.10 Torque limiter with through hollow shaft

2.10 Drehmomentbegrenzer mit durchgehender Hohlwelle



SFK SRK	C	CL	Ct	D (H8)	M	G
30	31.5	55.5	87	14	50x25.4x1.25	M25X1.5
40	41	67	108	19	56x30.5x1.5	M30X1.5
50	49	79	128	24	45x40.5x2	M40X1.5
63	60	97	157	25	71x40.5x2	M40X1.5
75	60	100	160	28 (30)	90x51x2.7	M50X1.5

() A richiesta / On request / Auf Anfrage

Nella versione con limitatore non è prevista la fornitura degli alberi lenti.

Il dispositivo viene consegnato tarato alla coppia riportata a catalogo T_{2M} salvo diversa indicazione espressa in fase di ordinazione.

The version with torque limiter is supplied without output shafts.

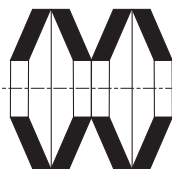
The device is supplied already calibrated at the torque reported in the catalogue T_{2M} , unless otherwise specified in the order.

Die Version mit Drehmomentbegrenzer wird ohne Abtriebswellen geliefert.

Wenn die Vorrichtung geliefert wird, ist sie schon auf das im Katalog mit T_{2M} angegebene Drehmoment geeicht, ausser wenn es in der Bestellung anders angegeben wird.

SFK SRK	N°. giri della ghiera di regolazione / N°. revolutions of ring nut / Nr. Umdrehungen der Mutter															
	3/4	1	1 1/4	1 1/2	1 3/4	2	2 1/4	2 1/2	2 3/4	3	3 1/4	3 1/2	3 3/4	4	4 1/4	4 1/2
M _{2S} [Nm]																
30		15	18	22	27	32										
40	23	30	35	40	45	50	60									
50		45	60	70	80	90	100	110								
63			80	90	100	110	120	130	140	150	160	170	180	190	200	
75		140	160	180	200	220	240	260	280	300						

Disposizione delle molle
Washers' arrangement
Lage der Feder



IN SERIE (min. coppia, max. sensibilità)
SERIES (min. torque, max sensitivity)
SERIE (min. Moment, max. Empfindlichkeit)



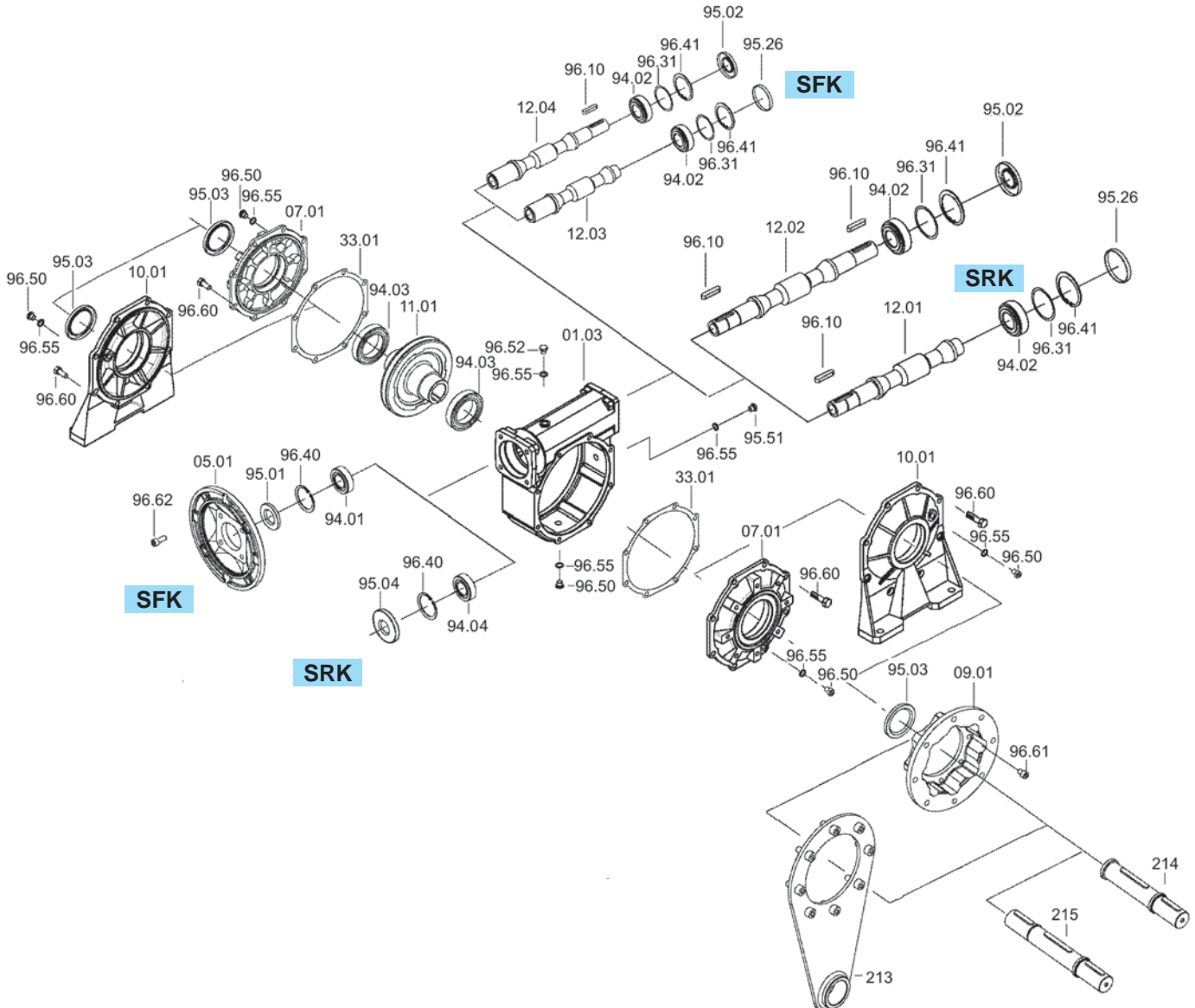
2 SFK - SRK

2.11 Lista parti di ricambio

2.11 Spare parts list

2.11 Ersatzteilliste

SFK - SRK



SFK SRK	IEC	Cuscinetti / Bearings / Lager				Anelli di tenuta / Oilseals Öldichtungen				Cappellotto Closed oil seal Geschlossene Öldichtung	
		94.01	94.02	94.03	94.04	95.01	95.02	95.03	95.04		
30	56	61804 (20x32x7)	6000 10x26x8	6005	*32005	6201	20/32/7	10/26/7	25/40/7	12/32/7	ø 26x7
	63	61804 (20x32x7)		25x47x12	25x47x15	12x32x10	20/32/7				
40	56	6303 (17x47x14)	6201 12x32x10	6006	*32006	6303	17/47/7	12/32/7	30/47/7 (30/45/8)	17/47/7	ø 32x7
	63	6204 (20x47x14)		30x55x13	30x55x17	17x47x14	20/47/7				
	71	6005 (25x47x12)		25x47x12	25x47x12	25x47x12	25/47/7				
50	63	6204 (20x47x14)	6203 17x40x12	6008	*32008	6204	20/47/7	17/40/7	40/62/8 (40/56/8)	20/47/7	ø 40x7
	71	6005 (25x47x12)		40x68x15	40x68x19	20x47x14	25/47/7				
	80	6006 (30x55x13)		30x55x13	30x55x17	30x55x17	30/55/7				
63	71	30305 (25x62x18.25)	30204 20x47x15.25	6008	*32008	30305	25/62/7	20/47/7	40/62/8	25/62/7	ø 47x7
	80	30206 (30x62x17.25)		40x68x15	40x68x19	25x62x18.25	30/62/7				
	90	32007 (35x62x18)		35x62x18	35x62x18	35x62x18	35/62/7				
75	71	30206 (30x62x17.25)	30205 25x52x16.25	6010	*32010	30305	30/62/7	25/52/7	50/72/8	25/62/7	ø 52x7
	80	30206 (30x62x17.25)		50x80x16	50x80x20	25x62x18.25	30/62/7				
	90	32007 (35x62x18)		35x62x18	35x62x18	35x62x18	35/62/7				
	100/112	32008 (40x68x19)		40x68x19	40x68x19	40x68x19	40/68/10				

1 : solo con flangia FP2 / only with flange FP2 / Nur mit Flansch für Drehmomentstütze FP2

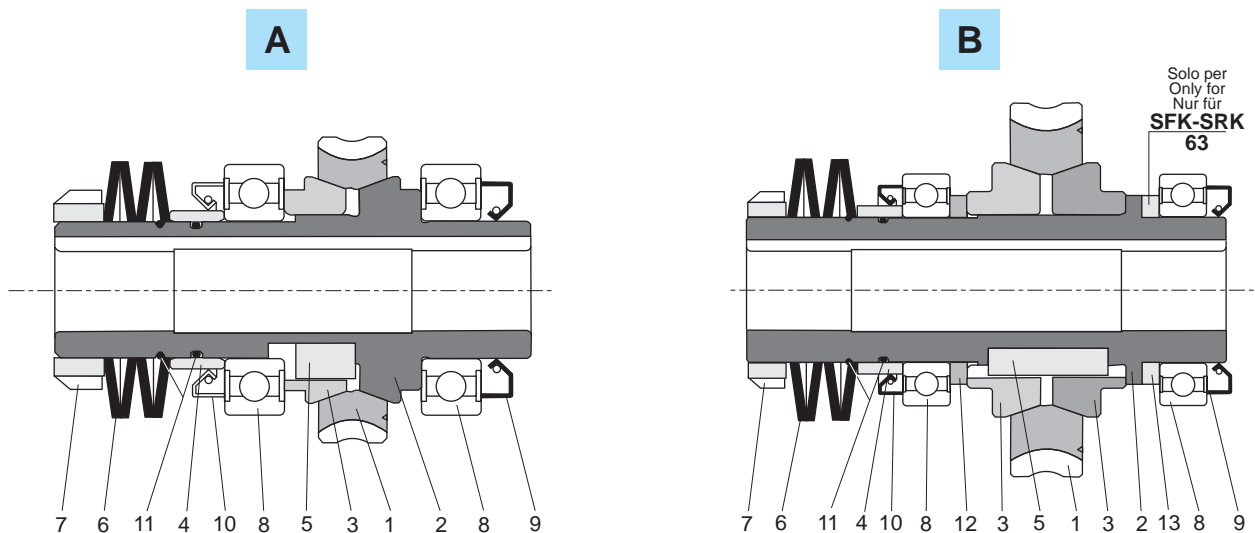
* Cuscinetti a rulli conici a richiesta - Tapered roller bearings on request - Auf Wunsch Kegelrollenlager

SFK - SRK

Limitatore di coppia cavo passante

Torque limiter with through hollow shaft

Drehmomentbegrenzer mit durchgehende Hohlwelle



	A			B	
SFK - SRK					
	30 (LD-LS)	40 (LD-LS)	50 (LD-LS)	63 (LD-LS)	75 (LD-LS)
1	Corona in bronzo / <i>Bronze wheel</i> / Bronzerad				
2	Albero cavo limitatore / <i>Hollow shaft torque limiter</i> / Rutschkupplungs-Hohlwelle				
3	Anello di frizione / <i>Friction ring</i> / Reibring				
4	Distanziale molle / <i>Washers' distance ring</i> / Federdistanzring				
5	Linguetta / <i>Key</i> / Passfeder				
	8x7x10AB	10x8x13AB	12x8x18AB	12x8x40A	16x10x40A
6	Molle a tazza / <i>Belleville washers</i> / Tellerfeder				
7	Ghiera / <i>Metal ring</i> / Metall Ring				
	Cuscinetti / <i>Bearings</i> / Lager				
8	6005 25x47x12	6006 30x55x13	6008 40x68x15	6008 40x68x15	6010 50x80x16
9	Anelli di tenuta / <i>Oilseals</i> / Öldichtungen				
	25x40x7	30x47x7	40x62x8	40x62x8	50x72x8
10	Anelli di tenuta / <i>Oilseals</i> / Öldichtungen				
	30x40x5	35x47x7	48x62x8	48x62x8	58x72x8
	O-rings in gomma / <i>Rubber O-rings</i> / Gummi-O-ringe				
11	OR2087 21.95x1.78	OR2106 26.7x1.78	OR 36.27x1.78	OR 36.27x1.78	OR2187 47.37x1.78
12	-			Distanziale / <i>Spacer</i> / Abstandshülse	
13	-			Distanziale / <i>Spacer</i> / Abstandshülse	-



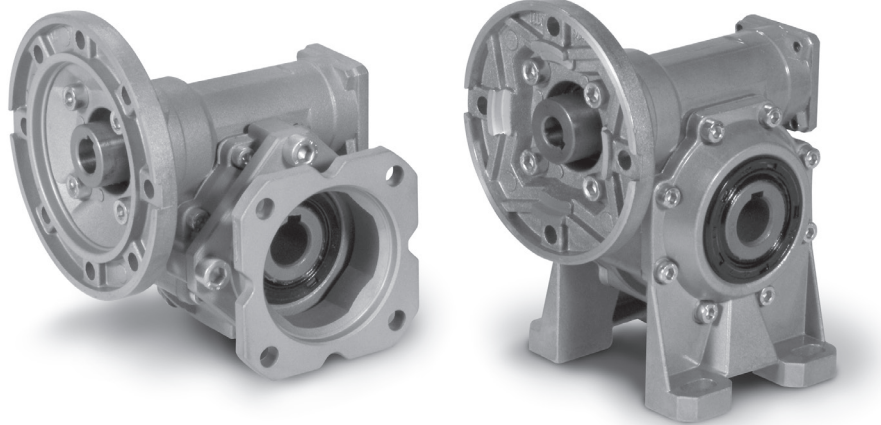
4

REDUCTORES TORNILLO SIN FIN BFK-BRK

BFK-BRK WORM GEARBOXES

RÉDUCTEUR À ROUE ET VIS SANS FIN BFK-BRK

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4.1 Características

Los reductores de tornillo sin fin BFK - BRK se presentan formidablemente ligeros gracias a su forma compacta de la carcasa en aluminio fundido bajo presión. La serie presenta varias posibilidades de versiones, con y sin pié, que la hacen aún más adaptable en el uso de cada tipología de aplicación.

Los tornillos sin fin son de acero aleado cementado - templado y son rectificadas. Los dientes de los engranajes realizados en hierro fundido y el anillo en bronce.

4.1 Characteristics

The BFK - BRK worm gearboxes are extremely light thanks to the compact shape of the housing made of cast aluminium. This series features a wide range of versions, with and without feet, with numerous accessories which make it extremely versatile for utilization in various applications.

The worm shaft is ground and is made of hardened-casehardened compound steel.

The worm wheel features a cast iron hub with bronze casting.

4.1 Caractéristiques

Les réducteurs à vis sans fin BFK - BRK sont extrêmement légers grâce à la forme compacte de leur carter, en fonte et en alliage d'aluminium. La série possède plusieurs versions possibles, avec et sans pattes, qui rendent son emploi universel pour chaque type d'application.

La vis sans fin est en acier cémenté et trempé. Le profil est rectifié. Le moyeu de la roue est en fonte avec un insert en bronze.

4.2 Nomenclatura

4.2 Designation

4.2 Désignation

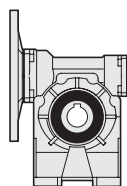
Reductor Gearbox Réducteur	Tamaño Size Taille	Versiones Version Version	Relación de red. Ratio Rapport de réduction	Enganche motor. Motor coupling Prédisposition	Posición de monta. Mounting position Position de montage	Limitador de par Torque limiter Limiteur de couple	Segunda entrada Additional input Deuxième entrée	Eje de salida Output shaft Arbre de sortie	Brazo de reacción Torque arm Bras de réaction
BFK	50	FS	10	80 B14	B3	LD	SeA	H	BR2
 BFK BRK	30 40 50 63 75	A B V P F...S F...D	5 7.5 10 15 20 25 30 40 50 65 80 100	56 ÷ 112 B5 56 ÷ 112 B14	B3 B6 B7 B8 V5 V6	LS LD	SeA	H SD SS DD	BR2

Versiones

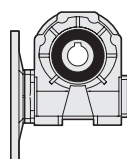
Versions

Versions

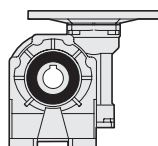
BFK..A_
BRK..A_



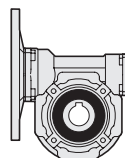
BFK..B_
BRK..B_



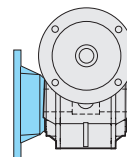
BFK..V_
BRK..V_



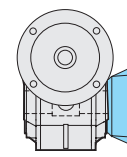
BFK..P_
BRK..P_



BFK..F_S
BRK..F_S



BFK..F_D
BRK..F_D



Especificar siempre ordenadamente la versión.

Specify the version when ordering.

Lors de toute commande, il est recommandé de préciser la version désirées.



4 BFK - BRK

4.3 Lubricación

Los reductores de tornillo sin fin BFK - BRK se entregan todos y siempre completos de lubricante sintético a base PAG con viscosidad ISO 320.

Los cuerpos de aluminio 30, 40, 50, 63, 75 tiene solamente un tapón de llenado para aceite.

4.3 Lubrication

BFK - BRK worm gearboxes are supplied with PAG synthetic lubricant featuring an ISO 320 viscosity class.

Aluminium housings size 30, 40, 50, 63 and 75 have one filling plug only.

4.3 Lubrification

Les réducteurs à roue et vis sans fin SFK - SRK sont livrés avec un lubrifiant synthétique à base PAG ayant un indice de viscosité ISO 320.

Les carters en aluminium 30, 40, 50, 63, 75 ont un seul bouchon de remplissage.

Cantidades de lubricante (litros)

Lubricant quantity (liters)

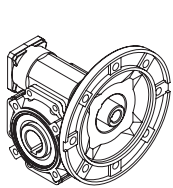
Quantité de lubrifiant (litres)

BFK BRK	B3	B6-B7	B8	V5-V6
30	0.015	0.025	0.015	
40	0.040	0.055	0.040	
50	0.080	0.110	0.080	
63	0.160			
75	0.260			

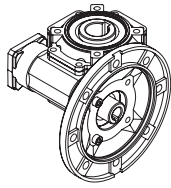
Posición de montaje

Mounting positions

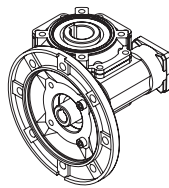
Positions de montage



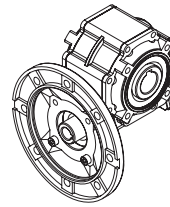
B3



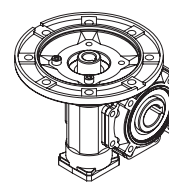
B6



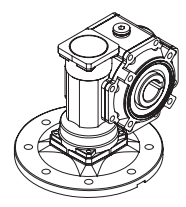
B7



B8



V5

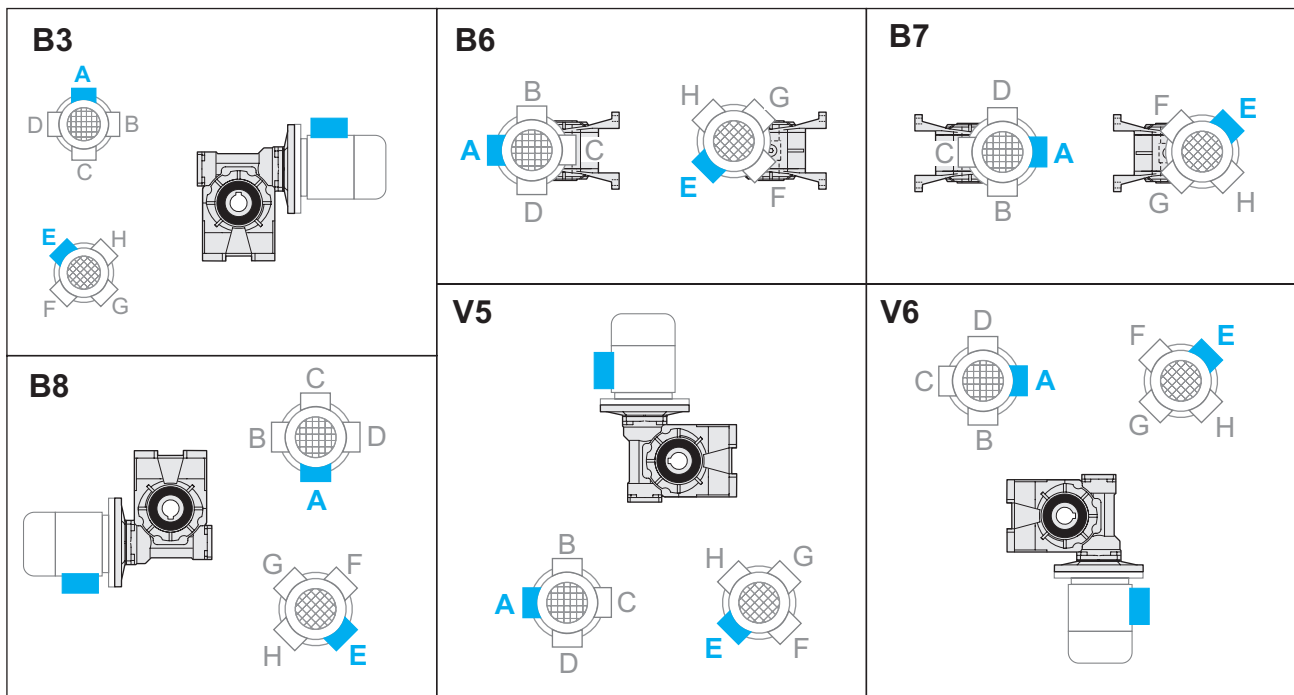


V6

4.4 Posición del tablero de borne

4.4 Terminal board position

4.4 Position de la boîte à bornes



4.5 Datos técnicos
4.5 Technical data
4.5 Données techniques

30	$n_1 = 2800$		BFK				BRK				
	i_n	n_2 [min ⁻¹]	T_2 [Nm]	P_1 [kW]	FS'	input IEC		T_{2M} [Nm]	P [kW]	R_d	P_{10}
						B5	B14				
Kg 1.2	5	560	5.6	0.37	2.5	63	56	14	0.92	0.89	—
	7.5	373	8	0.37	2.0			16	0.72	0.86	—
	10	280	11	0.37	1.5			16	0.56	0.84	—
	15	187	15	0.37	1.1			17	0.41	0.81	—
	20	140	13	0.25	1.2			15	0.29	0.76	—
	25	112	16	0.25	1.0			16	0.25	0.74	—
	30	93	13	0.18	1.0	56	13	0.18	0.71	—	
	40	70	16	0.18	1.0		16	0.18	0.65	—	
	50	56	14	0.13	1.1		15	0.14	0.62	—	
	65	43	17	0.13	1.0		17	0.13	0.57	—	
	80	35	13	0.09	1.0		13	0.09	0.54	—	
	100	28	16	0.09	0.8		12	0.07	0.52	—	

30	$n_1 = 1400$		BFK				BRK				
	i_n	n_2 [min ⁻¹]	T_2 [Nm]	P_1 [kW]	FS'	input IEC		T_{2M} [Nm]	P [kW]	R_d	P_{10}
						B5	B14				
Kg 1.2	5	280	6.5	0.22	2.9	63	56	19	0.64	0.87	0.40
	7.5	187	9	0.22	2.2			21	0.49	0.84	0.40
	10	140	12	0.22	1.8			22	0.40	0.82	0.40
	15	93	17	0.22	1.3			22	0.28	0.77	0.30
	20	70	18	0.18	1.1			19	0.19	0.72	0.20
	25	56	15	0.13	1.1			21	0.18	0.69	0.20
	30	47	18	0.13	1.4	56	20	0.15	0.66	0.20	
	40	35	14	0.09	1.4		21	0.13	0.59	0.20	
	50	28	17	0.09	1.1		19	0.10	0.55	0.20	
	65	22	14	0.06	1.3		20	0.09	0.51	0.10	
	80	18	16	0.06	1.1		17	0.06	0.48	0.10	
	100	14	18	0.06	0.8		14	0.05	0.45	0.10	

30	$n_1 = 900$		BFK				BRK				
	i_n	n_2 [min ⁻¹]	T_2 [Nm]	P_1 [kW]	FS'	input IEC		T_{2M} [Nm]	P [kW]	R_d	P_{10}
						B5	B14				
Kg 1.2	5	180	5.9	0.13	3.9	63	56	23	0.51	0.85	—
	7.5	120	9	0.13	2.9			25	0.38	0.82	—
	10	90	11	0.13	2.3			25	0.30	0.80	—
	15	60	15	0.13	1.6			25	0.21	0.75	—
	20	45	19	0.13	1.2			22	0.15	0.69	—
	25	36	23	0.13	1.1			24	0.14	0.66	—
	30	30	18	0.09	1.2	56	21	0.10	0.63	—	
	40	23	21	0.09	1.1		24	0.10	0.55	—	
	50	18	16	0.06	1.3		21	0.08	0.52	—	
	65	14	20	0.06	1.1		22	0.07	0.48	—	
	80	11	11	0.03	1.7		19	0.05	0.44	—	
	100	9	13	0.03	1.1		15	0.03	0.42	—	

30	$n_1 = 500$		BFK				BRK				
	i_n	n_2 [min ⁻¹]	T_2 [Nm]	P_1 [kW]	FS'	input IEC		T_{2M} [Nm]	P [kW]	R_d	P_{10}
						B5	B14				
Kg 1.2	5	100	—	—	—	63	56	29	0.36	0.83	—
	7.5	67	—	—	—			31	0.27	0.80	—
	10	50	—	—	—			31	0.21	0.77	—
	15	33	—	—	—			31	0.15	0.72	—
	20	25	—	—	—			26	0.10	0.66	—
	25	20	—	—	—			27	0.09	0.62	—
	30	17	—	—	—	56	25	0.07	0.59	—	
	40	13	—	—	—		28	0.07	0.51	—	
	50	10	—	—	—		25	0.06	0.48	—	
	65	8	—	—	—		25	0.05	0.43	—	
	80	6	—	—	—		20	0.03	0.40	—	
	100	5	—	—	—		16	0.02	0.38	—	

* **ATENCIÓN:** el par máximo utilizable [T_{2M}] deberá calcularse con respecto al factor de servicio: $T_{2M} = T_2 \times FS'$

* **WARNING:** Maximum allowable torque [T_{2M}] must be calculated using the following service factor: $T_{2M} = T_2 \times FS'$

* **ATTENTION :** le couple maximum admissible [T_{2M}] se calcule en utilisant le facteur de service suivant: $T_{2M} = T_2 \times FS'$



4.5 Datos técnicos

4.5 Technical data

4.5 Données techniques

40	$n_1 = 2800$		BFK				BRK				
	i_n	n_2 [min ⁻¹]	T_2 [Nm]	P_1 [kW]	FS'	input IEC		T_{2M} [Nm]	P [kW]	R_d	P_{10}
						B5	B14				
Kg 2.0	5	560	11.3	0.75	2.2	71	63	25	1.67	0.88	—
	7.5	373	17	0.75	1.8			30	1.3	0.87	—
	10	280	22	0.75	1.4			31	1.1	0.86	—
	15	187	32	0.75	1.0			32	0.76	0.82	—
	20	140	30	0.55	1.0			31	0.57	0.80	—
	25	112	24	0.37	1.1			27	0.41	0.76	—
	30	93	28	0.37	1.3	35	0.47	0.73	—		
	40	70	24	0.25	1.4	33	0.35	0.70	—		
	50	56	28	0.25	1.1	30	0.27	0.65	—		
	65	43	24	0.18	1.2	28	0.21	0.61	—		
	80	35	21	0.13	1.3	26	0.16	0.58	—		
	100	28	24	0.13	1.0	25	0.13	0.55	—		

40	$n_1 = 1400$		BFK				BRK				
	i_n	n_2 [min ⁻¹]	T_2 [Nm]	P_1 [kW]	FS'	input IEC		T_{2M} [Nm]	P [kW]	R_d	P_{10}
						B5	B14				
Kg 2.0	5	280	16.3	0.55	2.1	71	63	34	1.14	0.87	0.80
	7.5	187	24	0.55	1.7			40	0.92	0.85	0.80
	10	140	31	0.55	1.3			41	0.73	0.83	0.70
	15	93	30	0.37	1.4			42	0.52	0.79	0.50
	20	70	38	0.37	1.0			40	0.39	0.76	0.50
	25	56	31	0.25	1.1			35	0.29	0.72	0.40
	30	47	35	0.25	1.3	41	0.29	0.68	0.40		
	40	35	38	0.22	1.1	38	0.22	0.64	0.30		
	50	28	36	0.18	1.0	38	0.19	0.59	0.30		
	65	22	31	0.13	1.1	35	0.15	0.54	0.20		
	80	18	31	0.11	1.1	33	0.12	0.52	0.20		
	100	14	30	0.09	0.9	28	0.08	0.49	0.20		

40	$n_1 = 900$		BFK				BRK				
	i_n	n_2 [min ⁻¹]	T_2 [Nm]	P_1 [kW]	FS'	input IEC		T_{2M} [Nm]	P [kW]	R_d	P_{10}
						B5	B14				
Kg 2.0	5	180	16.7	0.37	2.5	71	63	42	0.93	0.85	—
	7.5	120	25	0.37	2.0			48	0.72	0.83	—
	10	90	32	0.37	1.5			48	0.56	0.81	—
	15	60	45	0.37	1.1			49	0.40	0.76	—
	20	45	39	0.25	1.2			46	0.29	0.74	—
	25	36	33	0.18	1.3			42	0.23	0.69	—
	30	30	37	0.18	1.3	48	0.23	0.65	—		
	40	23	33	0.13	1.3	42	0.16	0.61	—		
	50	18	38	0.13	1.1	42	0.14	0.55	—		
	65	14	32	0.09	1.2	39	0.11	0.51	—		
	80	11	37	0.09	1.0	37	0.09	0.48	—		
	100	9	29	0.06	1.0	30	0.06	0.45	—		

40	$n_1 = 500$		BFK				BRK				
	i_n	n_2 [min ⁻¹]	T_2 [Nm]	P_1 [kW]	FS'	input IEC		T_{2M} [Nm]	P [kW]	R_d	P_{10}
						B5	B14				
Kg 2.0	5	100	7.1	0.09	7.1	71	63	51	0.64	0.83	—
	7.5	67	10	0.09	5.5			58	0.50	0.81	—
	10	50	14	0.09	4.4			59	0.39	0.79	—
	15	33	19	0.09	3.1			59	0.28	0.73	—
	20	25	24	0.09	2.3			55	0.20	0.70	—
	25	20	28	0.09	1.7			48	0.15	0.65	—
	30	17	31	0.09	1.8	58	0.17	0.61	—		
	40	13	39	0.09	1.3	52	0.12	0.57	—		
	50	10	44	0.09	1.2	51	0.11	0.51	—		
	65	8	52	0.09	0.9	45	0.08	0.46	—		
	80	6	61*	0.09	0.7*	42	0.06	0.44	—		
	100	5	71*	0.09	0.4*	32	0.04	0.41	—		

* **ATENCIÓN:** el par máximo utilizable [T_{2M}] deberá calcularse con respecto al factor de servicio: $T_{2M} = T_2 \times FS'$

* **WARNING:** Maximum allowable torque [T_{2M}] must be calculated using the following service factor: $T_{2M} = T_2 \times FS'$

* **ATTENTION :** le couple maximum admissible [T_{2M}] se calcule en utilisant le facteur de service suivant : $T_{2M} = T_2 \times FS'$

4.5 Datos técnicos

4.5 Technical data

4.5 Données techniques

50	$n_1 = 2800$		BFK				BRK				
	i_n	n_2 [min ⁻¹]	T_2 [Nm]	P_1 [kW]	FS'	input IEC		T_{2M} [Nm]	P [kW]	Rd	P_{10}
						B5	B14				
 3.4	5	560	22.8	1.5	1.9	80	71	44	2.9	0.89	—
	7.5	373	34	1.5	1.5			51	2.3	0.88	—
	10	280	44	1.5	1.2			54	1.8	0.86	—
	15	187	47	1.1	1.2			57	1.3	0.84	—
	20	140	42	0.75	1.4			58	1.0	0.81	—
	25	112	50	0.75	1.0			50	0.75	0.78	—
	30	93	42	0.55	1.3	55	0.71	0.75	—		
	40	70	54	0.55	1.0	80-71-63		54	0.63	0.72	—
	50	56	43	0.37	1.3	71	63	56	0.48	0.68	—
	65	43	53	0.37	1.0			53	0.37	0.64	—
	80	35	41	0.25	1.2			48	0.29	0.61	—
	100	28	35	0.18	1.3			45	0.23	0.58	—

50	$n_1 = 1400$		BFK				BRK				
	i_n	n_2 [min ⁻¹]	T_2 [Nm]	P_1 [kW]	FS'	input IEC		T_{2M} [Nm]	P [kW]	Rd	P_{10}
						B5	B14				
 3.4	5	280	26.7	0.9	2.3	80	71	62	2.1	0.87	1.2
	7.5	187	40	0.9	1.8			70	1.6	0.86	1.2
	10	140	52	0.9	1.4			73	1.3	0.84	1.0
	15	93	61	0.75	1.2			74	0.90	0.80	0.80
	20	70	59	0.55	1.3			75	0.71	0.78	0.70
	25	56	47	0.37	1.4			65	0.51	0.74	0.60
	30	47	54	0.37	1.5	66	0.46	0.71	0.60		
	40	35	68	0.37	1.2	80-71-63		69	0.38	0.67	0.50
	50	28	53	0.25	1.3	71	63	70	0.33	0.62	0.40
	65	22	64	0.25	1.0			64	0.25	0.58	0.40
	80	18	53	0.18	1.1			60	0.20	0.54	0.40
	100	14	45	0.13	1.2			55	0.16	0.51	0.30

50	$n_1 = 900$		BFK				BRK				
	i_n	n_2 [min ⁻¹]	T_2 [Nm]	P_1 [kW]	FS'	input IEC		T_{2M} [Nm]	P [kW]	Rd	P_{10}
						B5	B14				
 3.4	5	180	33.8	0.75	2.2	80	71	75	1.66	0.85	—
	7.5	120	50	0.75	1.6			83	1.23	0.84	—
	10	90	66	0.75	1.3			86	0.98	0.82	—
	15	60	68	0.55	1.3			88	0.71	0.78	—
	20	45	59	0.37	1.5			87	0.54	0.75	—
	25	36	70	0.37	1.1			75	0.40	0.71	—
	30	30	79	0.37	1.0	79	0.37	0.67	—		
	40	23	67	0.25	1.1	80-71-63		75	0.28	0.63	—
	50	18	78	0.25	1.0	71	63	80	0.26	0.59	—
	65	14	67	0.18	1.1			74	0.20	0.54	—
	80	11	56	0.13	1.2			67	0.16	0.51	—
	100	9	45	0.09	1.3			58	0.12	0.47	—

50	$n_1 = 500$		BFK				BRK				
	i_n	n_2 [min ⁻¹]	T_2 [Nm]	P_1 [kW]	FS'	input IEC		T_{2M} [Nm]	P [kW]	Rd	P_{10}
						B5	B14				
 3.4	5	100	14.3	0.18	6.4	80	71	92	1.15	0.84	—
	7.5	67	21	0.18	4.7			100	0.85	0.82	—
	10	50	28	0.18	3.8			104	0.68	0.80	—
	15	33	39	0.18	2.7			106	0.49	0.75	—
	20	25	50	0.18	2.1			104	0.38	0.72	—
	25	20	58	0.18	1.5			88	0.27	0.68	—
	30	17	65	0.18	1.5	98	0.27	0.63	—		
	40	13	81	0.18	1.2	80-71-63		95	0.21	0.59	—
	50	10	93	0.18	1.0	71	63	94	0.18	0.54	—
	65	8	56	0.09	1.5			86	0.14	0.50	—
	80	6	63	0.09	1.2			77	0.11	0.46	—
	100	5	74	0.09	0.8			61	0.07	0.43	—

* **ATENCIÓN:** el par máximo utilizable [T_{2M}] deberá calcularse con respecto al factor de servicio: $T_{2M} = T_2 \times FS'$

* **WARNING:** Maximum allowable torque [T_{2M}] must be calculated using the following service factor: $T_{2M} = T_2 \times FS'$

* **ATTENTION :** le couple maximum admissible [T_{2M}] se calcule en utilisant le facteur de service suivant: $T_{2M} = T_2 \times FS'$



4.5 Datos técnicos

4.5 Technical data

4.5 Données techniques

63	$n_1 = 2800$		BFK				BRK				
	i_n	n_2 [min ⁻¹]	T_2 [Nm]	P_1 [kW]	FS'	input IEC		T_{2M} [Nm]	P [kW]	R_d	P_{10}
						B5	B14				
Kg 6.3	5	560	45.5	3	1.7	80	90	79	5.2	0.89	—
	7.5	373	68	3	1.3			88	3.9	0.88	—
	10	280	89	3	1.1			94	3.2	0.87	—
	15	187	95	2.2	1.0			98	2.3	0.84	—
	20	140	85	1.5	1.3			110	1.9	0.83	—
	25	112	76	1.1	1.2			93	1.4	0.81	—
	30	93	87	1.1	1.3	110	1.4	0.77	—		
	40	70	111	1.1	1.1	71	80	117	1.2	0.74	—
	50	56	90	0.75	1.1			97	0.81	0.70	—
	65	43	81	0.55	1.2			98	0.66	0.67	—
	80	35	65	0.37	1.4			91	0.52	0.64	—
	100	28	75	0.37	1.1			83	0.41	0.60	—

63	$n_1 = 1400$		BFK				BRK				
	i_n	n_2 [min ⁻¹]	T_2 [Nm]	P_1 [kW]	FS'	input IEC		T_{2M} [Nm]	P [kW]	R_d	P_{10}
						B5	B14				
Kg 6.3	5	280	54	1.8	2.0	80	90	111	3.7	0.88	1.8
	7.5	187	80	1.8	1.5			120	2.7	0.87	1.8
	10	140	105	1.8	1.2			127	2.2	0.85	1.6
	15	93	125	1.5	1.1			130	1.6	0.81	1.2
	20	70	120	1.1	1.2			144	1.3	0.80	1.2
	25	56	118	0.9	1.0			118	0.90	0.77	1.0
	30	47	134	0.9	1.1	142	0.95	0.73	0.90		
	40	35	142	0.75	1.1	71	80	150	0.79	0.69	0.80
	50	28	122	0.55	1.0			122	0.55	0.65	0.70
	65	22	100	0.37	1.2			122	0.45	0.61	0.60
	80	18	79	0.25	1.4			113	0.36	0.58	0.60
	100	14	91	0.25	1.1			102	0.28	0.53	0.50

63	$n_1 = 900$		BFK				BRK				
	i_n	n_2 [min ⁻¹]	T_2 [Nm]	P_1 [kW]	FS'	input IEC		T_{2M} [Nm]	P [kW]	R_d	P_{10}
						B5	B14				
Kg 6.3	5	180	69	1.5	1.9	80	90	135	2.9	0.87	—
	7.5	120	102	1.5	1.4			144	2.1	0.85	—
	10	90	133	1.5	1.1			150	1.7	0.83	—
	15	60	139	1.1	1.1			152	1.2	0.79	—
	20	45	123	0.75	1.4			167	1.0	0.77	—
	25	36	109	0.55	1.3			140	0.71	0.74	—
	30	30	122	0.55	1.3	164	0.74	0.70	—		
	40	23	154	0.55	1.1	71	80	171	0.61	0.66	—
	50	18	120	0.37	1.2			141	0.44	0.61	—
	65	14	98	0.25	1.4			139	0.35	0.57	—
	80	11	115	0.25	1.1			128	0.28	0.54	—
	100	9	95	0.18	1.2			115	0.22	0.50	—

63	$n_1 = 500$		BFK				BRK				
	i_n	n_2 [min ⁻¹]	T_2 [Nm]	P_1 [kW]	FS'	input IEC		T_{2M} [Nm]	P [kW]	R_d	P_{10}
						B5	B14				
Kg 6.3	5	100	20	0.25	8.3	80	90	169	2.08	0.85	—
	7.5	67	30	0.25	5.9			177	1.5	0.83	—
	10	50	39	0.25	4.7			182	1.2	0.81	—
	15	33	55	0.25	3.4			184	0.84	0.76	—
	20	25	71	0.25	2.8			200	0.70	0.74	—
	25	20	85	0.25	1.9			165	0.49	0.71	—
	30	17	94	0.25	2.1	195	0.52	0.65	—		
	40	13	118	0.25	1.7	71	80	201	0.43	0.62	—
	50	10	135	0.25	1.2			165	0.31	0.56	—
	65	8	163	0.25	1.0			161	0.25	0.52	—
	80	6	137	0.18	1.1			148	0.19	0.50	—
	100	5	77	0.09	1.6			122	0.14	0.45	—

* **ATENCIÓN:** el par máximo utilizable [T_{2M}] deberá calcularse con respecto al factor de servicio: $T_{2M} = T_2 \times FS'$

* **WARNING:** Maximum allowable torque [T_{2M}] must be calculated using the following service factor: $T_{2M} = T_2 \times FS'$

* **ATTENTION :** le couple maximum admissible [T_{2M}] se calcule en utilisant le facteur de service suivant : $T_{2M} = T_2 \times FS'$

4.5 Datos técnicos

4.5 Technical data

4.5 Données techniques

75	$n_1 = 2800$		BFK				BRK				
	i_n	n_2 [min ⁻¹]	T_2 [Nm]	P_1 [kW]	FS'	input IEC		T_{2M} [Nm]	P [kW]	R_d	P_{10}
						B5	B14				
Kg 7.6	7.5	373	125	5.5	1.0	90 100 112		131	5.8	0.89	—
	10	280	120	4	1.2			143	4.8	0.88	—
	15	187	131	3	1.2			152	3.5	0.85	—
	20	140	171	3	1.0			172	3.0	0.84	—
	25	112	154	2.2	1.0			155	2.2	0.82	—
	30	93	120	1.5	1.4	71(B5)-80-90-100-112		170	2.1	0.78	—
	40	70	154	1.5	1.2	80 90		183	1.8	0.75	—
	50	56	136	1.1	1.2			166	1.3	0.73	—
	65	43	114	0.75	1.4	71	80 90	155	1.0	0.69	—
	80	35	135	0.75	1.1	80		145	0.80	0.66	—
100	28	159	0.75	0.8	90	131		0.62	0.62	—	

75	$n_1 = 1400$		BFK				BRK				
	i_n	n_2 [min ⁻¹]	T_2 [Nm]	P_1 [kW]	FS'	input IEC		T_{2M} [Nm]	P [kW]	R_d	P_{10}
						B5	B14				
Kg 7.6	7.5	187	178	4	1.0	90 100 112		180	4.0	0.87	2.5
	10	140	176	3	1.1			193	3.3	0.86	2.3
	15	93	187	2.2	1.1			202	2.4	0.83	1.9
	20	70	199	1.8	1.1			226	2.0	0.81	1.7
	25	56	200	1.5	1.0			202	1.5	0.78	1.5
	30	47	167	1.1	1.3	71(B5)-80-90-100-112		220	1.5	0.74	1.2
	40	35	213	1.1	1.1	80 90		235	1.2	0.71	1.1
	50	28	206	0.9	1.0			211	0.92	0.67	1.0
	65	22	154	0.55	1.3	71	80 90	195	0.70	0.63	0.90
	80	18	180	0.55	1.0	80		182	0.55	0.60	0.80
100	14	210	0.55	0.8	90	182		0.43	0.56	0.70	

75	$n_1 = 900$		BFK				BRK				
	i_n	n_2 [min ⁻¹]	T_2 [Nm]	P_1 [kW]	FS'	input IEC		T_{2M} [Nm]	P [kW]	R_d	P_{10}
						B5	B14				
Kg 7.6	7.5	120	205	3	1.0	90 100 112		215	3.1	0.86	—
	10	90	197	2.2	1.2			229	2.6	0.84	—
	15	60	231	1.8	1.0			237	1.9	0.81	—
	20	45	250	1.5	1.1			263	1.6	0.78	—
	25	36	221	1.1	1.1			233	1.2	0.76	—
	30	30	249	1.1	1.0	71(B5)-80-90-100-112		254	1.1	0.71	—
	40	23	214	0.75	1.3	80 90		270	0.94	0.67	—
	50	18	186	0.55	1.3			241	0.71	0.64	—
	65	14	151	0.37	1.5	71	80 90	221	0.54	0.59	—
	80	11	177	0.37	1.2	80		205	0.43	0.56	—
100	9	203	0.37	0.9	90	184		0.34	0.52	—	

75	$n_1 = 500$		BFK				BRK				
	i_n	n_2 [min ⁻¹]	T_2 [Nm]	P_1 [kW]	FS'	input IEC		T_{2M} [Nm]	P [kW]	R_d	P_{10}
						B5	B14				
Kg 7.6	7.5	67	90	0.75	2.9	90 100 112		265	2.2	0.84	—
	10	50	118	0.75	2.4			279	1.8	0.82	—
	15	33	167	0.75	1.7			286	1.3	0.78	—
	20	25	216	0.75	1.5			315	1.1	0.75	—
	25	20	260	0.75	1.1			278	0.80	0.72	—
	30	17	288	0.75	1.1	71(B5)-80-90-100-112		302	0.79	0.67	—
	40	13	265	0.55	1.2	80 90		317	0.66	0.63	—
	50	10	210	0.37	1.3			282	0.50	0.59	—
	65	8	251	0.37	1.0	71	80 90	257	0.38	0.55	—
	80	6	197	0.25	1.2	80		238	0.30	0.52	—
100	5	161	0.18	1.3	90	206		0.23	0.47	—	

* **ATENCIÓN:** el par máximo utilizable [T_{2M}] deberá calcularse con respecto al factor de servicio: $T_{2M} = T_2 \times FS'$

* **WARNING:** Maximum allowable torque [T_{2M}] must be calculated using the following service factor: $T_{2M} = T_2 \times FS'$

* **ATTENTION :** le couple maximum admissible [T_{2M}] se calcule en utilisant le facteur de service suivant: $T_{2M} = T_2 \times FS'$



4 BFK - BRK

4.6 **Momento de inercia** [Kg·cm²]
(referido al eje rápido de entrada)

4.6 **Moments of inertia** [Kg·cm²]
(referred to input shaft)

4.6 **Moments d'inertie** [Kg·cm²]
(se rapportant à l'arbre d'entrée)

30

i _n	BRK	BFK	
		B5 - B14	
		IEC 56	IEC 63
5	0.077	0.130	0.127
7.5	0.058	0.112	0.109
10	0.049	0.103	0.100
15	0.042	0.097	0.094
20	0.039	0.095	0.092
25	0.038	0.094	0.091
30	0.038	0.093	0.090
40	0.037	0.093	0.090
50	0.037	0.092	0.089
65	0.024	0.079	-
80	0.024	0.079	-
100	0.024	0.078	-

40

i _n	BRK	BFK		
		B5 - B14		
		IEC 56	IEC 63	IEC 71
5	0.242	-	0.391	0.463
7.5	0.170	-	0.321	0.356
10	0.144	-	0.272	0.347
15	0.125	-	0.266	0.340
20	0.094	-	0.263	0.338
25	0.091	-	0.262	0.337
30	0.113	-	0.262	0.337
40	0.087	-	0.261	0.337
50	0.087	0.182	0.261	-
65	0.069	0.182	0.261	-
80	0.069	0.182	0.261	-
100	0.068	0.182	0.261	-

50

i _n	BRK	BFK		
		B5 - B14		
		IEC 63	IEC 71	IEC 80
5	0.744	-	0.922	1.046
7.5	0.499	-	0.684	0.935
10	0.417	-	0.602	0.853
15	0.358	-	0.543	0.794
20	0.281	-	0.523	0.774
25	0.272	-	0.513	0.764
30	0.323	-	0.508	0.759
40	0.262	0.311	0.503	0.755
50	0.183	0.311	0.501	-
65	0.136	0.311	0.499	-
80	0.136	0.310	0.498	-
100	0.135	0.309	0.498	-

63

i _n	BRK	BFK		
		B5 - B14		
		IEC 71	IEC 80	IEC 90
5	1.853	-	2.431	2.671
7.5	1.363	-	1.949	2.269
10	1.158	-	1.744	2.063
15	1.011	-	1.597	1.916
20	0.710	-	1.545	1.864
25	0.679	-	1.514	1.833
30	0.922	-	1.508	1.828
40	0.660	0.958	1.495	-
50	0.653	0.958	1.488	-
65	0.552	0.955	1.484	-
80	0.550	0.953	1.482	-
100	0.549	0.952	1.481	-

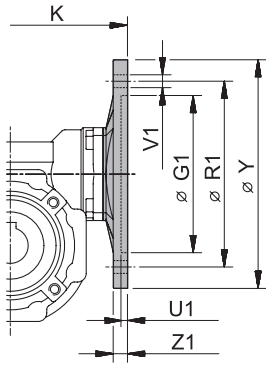
75

i _n	BRK	BFK			
		B5 - B14			
		IEC 71	IEC 80	IEC 90	IEC 100-112
7.5	2.970	-	-	3.712	4.462
10	2.492	-	-	3.234	3.984
15	2.151	-	-	2.893	3.643
20	1.567	-	-	2.774	3.523
25	1.501	-	-	2.709	3.458
30	1.946	1.615	1.575	2.689	3.438
40	1.451	-	1.573	2.659	-
50	1.435	-	1.570	2.642	-
65	1.158	1.609	1.569	2.633	-
80	1.153	1.605	1.565	2.629	-
100	1.150	1.602	1.562	2.626	-

4.7 Posibles configuraciones

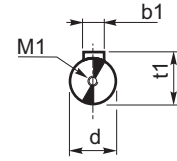
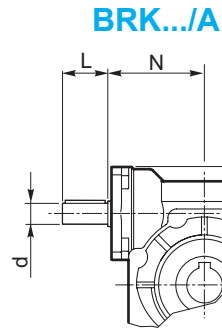
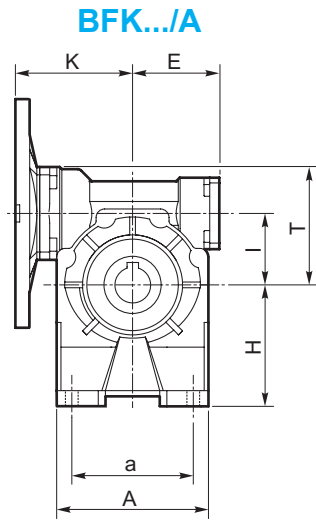
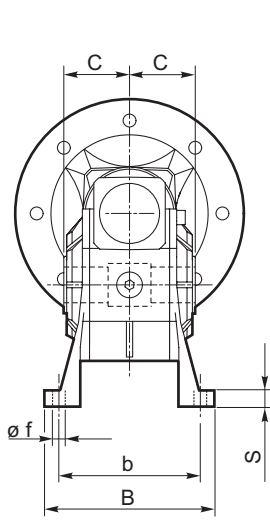
4.7 Possible set-ups

4.7 Prédispositions possibles

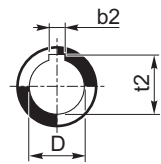
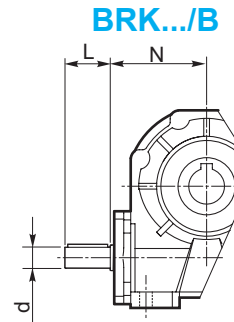
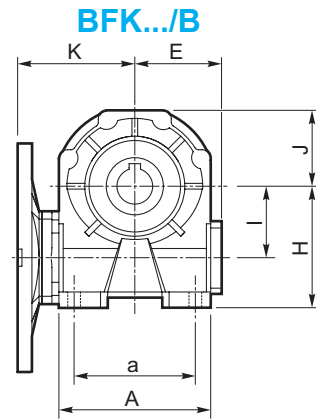
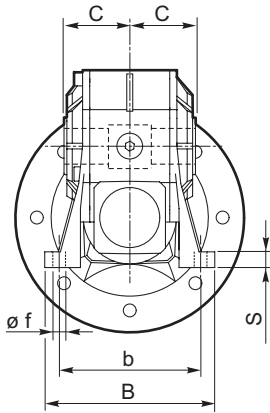


BFK	PAM IEC	G ₁	K	R ₁	U ₁	V1			Y	Z ₁	Diámetro orificios PAM / Holes diameter IEC-Input Diamètres trous PAM																			
						Ø					5	7.5	10	15	20	25	30	40	50	65	80	100								
						n°	8	4																						
30	56 B5	80	57	100	4	7	n° 8		120	8	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	
	56 B14	50		65	3.5	6	n° 8		80	8	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
	63 B5	95		115	4	9	n° 8		140	8	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	/	/	/	/
	63 B14	60		75	4	6	n° 8		90	8	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	/	/	/	/	/
40	56 B5	80	75	100	4	7	n° 8		120	9	/	/	/	/	/	/	/	/	/	/	/	9	9	9	9	9	9	9	9	
	56 B14	50		65	3.5	6		n° 4	80	8	/	/	/	/	/	/	/	/	/	/	/	/	9	9	9	9	9	9	9	9
	63 B5	95		115	4	9	n° 8		140	9	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
	63 B14	60		75	3.5	6		n° 4	90	8	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
	71 B5	110		130	4.5	9	n° 8		160	10	14	14	14	14	14	14	14	14	14	14	14	14	/	/	/	/	/	/	/	/
	71 B14	70		85	3.5	7	n° 8		105	8	14	14	14	14	14	14	14	14	14	14	14	14	/	/	/	/	/	/	/	/
50	63 B5	95	82	115	4	9	n° 8		140	9	/	/	/	/	/	/	/	/	/	/	/	11	11	11	11	11	11	11	11	
	63 B14	60		75	3.5	6		n° 4	90	8	/	/	/	/	/	/	/	/	/	/	/	/	11	11	11	11	11	11	11	11
	71 B5	110		130	4.5	9	n° 8		160	10	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14
	71 B14	70		85	3.5	7	(n° 8)*	n° 4	105	8	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14
	80 B5	130		165	4.5	11	n° 8		200	10	19	19	19	19	19	19	19	19	19	19	19	19	/	/	/	/	/	/	/	/
	80 B14	80		100	4	7	n° 8		120	10	19	19	19	19	19	19	19	19	19	19	19	19	/	/	/	/	/	/	/	/
63	71 B5	110	97	130	4.5	9	n° 8		160	10	/	/	/	/	/	/	/	/	/	/	/	14	14	14	14	14	14	14	14	
	71 B14	70		85	3.5	7		n° 4	105	10	/	/	/	/	/	/	/	/	/	/	/	/	14	14	14	14	14	14	14	14
	80 B5	130		165	4.5	11	n° 8		200	10	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
	80 B14	80		100	4	7		n° 4	120	10	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
	90 B5	130		165	4.5	11	n° 8		200	10	24	24	24	24	24	24	24	24	24	24	24	24	/	/	/	/	/	/	/	/
	90 B14	95		115	4	8.5	n° 8		140	10	24	24	24	24	24	24	24	24	24	24	24	24	/	/	/	/	/	/	/	/
75	71 B5	110	114	130	4.5	9	n° 8		160	10	/	/	/	/	/	/	/	/	/	/	14	/	/	14	14	14	14	14	14	
	80 B5	130		165	4.5	11	n° 8		200	10	/	/	/	/	/	/	/	/	/	/	/	19	19	19	19	19	19	19	19	
	80 B14	80		100	4	7		n° 4	120	11	/	/	/	/	/	/	/	/	/	/	/	19	19	19	19	19	19	19	19	
	90 B5	130		165	4.5	11	n° 8		200	10	/	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	
	90 B14	95		115	4	9		n° 4	140	11	/	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	
	100/112 B5	180		215	5	14	n° 8		250	13	/	28	28	28	28	28	28	28	28	28	28	28	/	/	/	/	/	/	/	
	100 B14	110		130	4.5	9	n° 8		160	11	/	28	28	28	28	28	28	28	28	28	28	28	/	/	/	/	/	/	/	

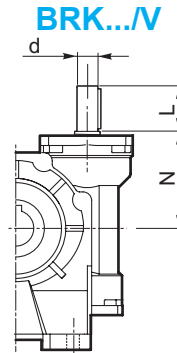
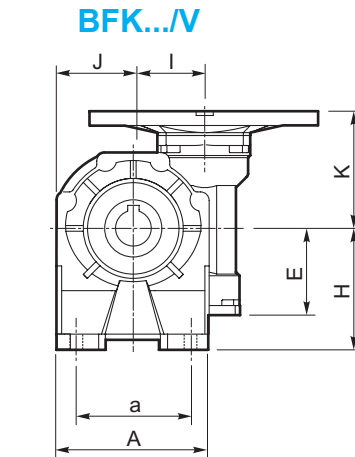
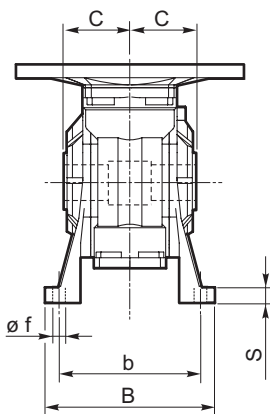
* A petición, solo con cuerpo especial / Upon request, only with special body / Uniquement corps spécial sur demande



BRK	Eje de entrada Input shaft Arbre d'entrée			
	d (j6)	b1	t1	M1
30	9	3	10.2	M4x10
40	11	4	12.5	M4x10
50	14	5	16	M5x13
63	18	6	20.5	M6x16
75	19	6	21.5	M6x16



BFK BRK	Eje lento del cable Hollow output shaft Arbre creux de sortie		
	D H8	b2	t2
30	14	5	16.3
40	18	6	20.8
50	25	8	28.3
63	25	8	28.3
75	28 (30)	8 (8)	31.3 (33.3)



A, B, V

BFK BRK	A	a	B	b	C	E	f	H	I	J	K	L	N	s	T
30	67	52 ÷ 40	78	66	27.5	41	6.5	55	31.5	37.5	57	20	47	8	52.5
40	86.5	52	98	81	32	51	8.5	72	40	43.5	75	22	64	10	68.5
50	107	63	118	98.5	41	60	9	82	50	53.5	82	30	74	10	82.5
63	127.5	95	136	111	60	71	11	100	63	64	97	45	80	12	100.5
75	155.5	120	140	112 ÷ 120	60	85	11	115	75	78	114	40	98	12	116.5

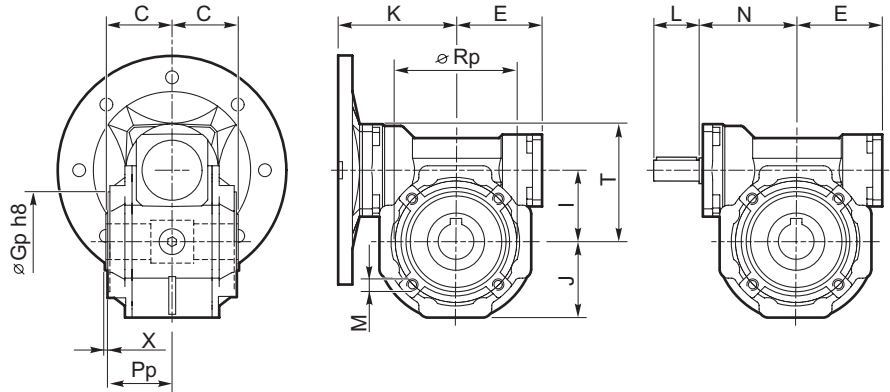
4.8 Tamaño

4.8 Dimensions

4.8 Dimensions

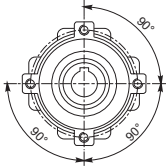
BFK.../P

BRK.../P



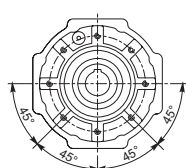
Brida pendular / Side cover for shaft mounting / Bride pendulaire

30 - 40 - 50



4 Agujeros / Holes / Trous

63 - 75



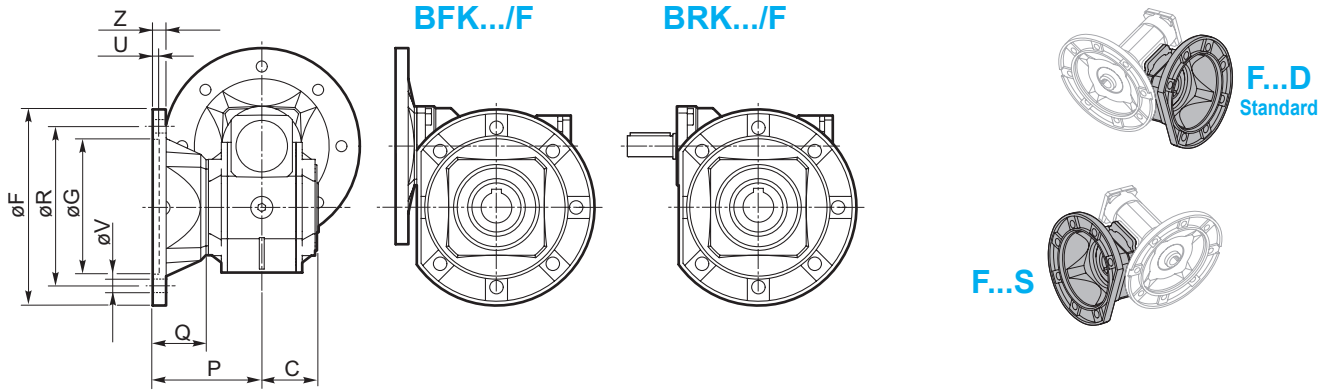
8 Agujeros / Holes / Trous

P					
BFK BRK	30	40	50	63	75
G_p h8	50	50	68	75	90
M	M6x8	M6X10	M6x8	M8x14	M8x14
P_p	30	38	44	45	46
R_p	65	65	94	90	110
X	1.5	1.5	2	10	13

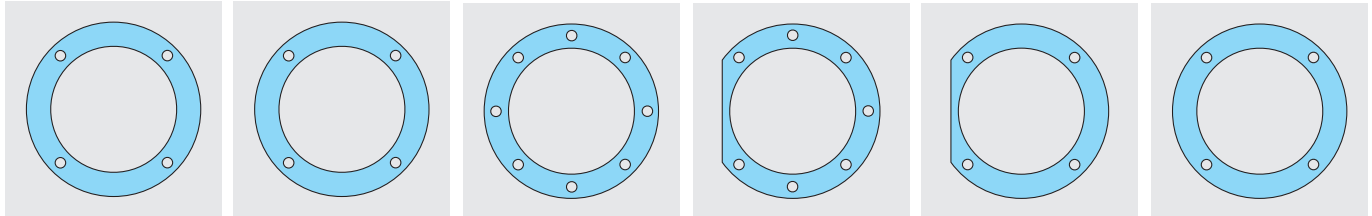
P								
BFK BRK	C	E	I	J	K	L	N	T
30	27.5	41	31.5	37.5	57	20	47	52.5
40	32	51	40	43.5	75	22	64	68.5
50	41	60	50	53.5	82	30	74	82.5
63	60	71	63	64	97	45	80	100.5
75	60	85	75	78	114	40	98	116.5



Brida de salida / Output flange / Bride de sortie



Tipo brida / Type flange / Type bride



30	40	50	63	63	75	63	75	75
F	F	F - F1	F	F1	F - F1	F2	F2 - F3 F3A	F4

BFK BRK	Tipo brida Type flange Type bride	C	F		G (H8)	P	Q	R	U	V			Z
												Ø	
30	F	27.5	82		50	50.5	23	68	3.5	n° 4		6.0	6
40	F	32	110		60	60	28	87	5	n° 4		9	8
50	F	41	125		70	85	44	90	5	n° 4		10.5	10
	F1		125		70	115	74	90	5	n° 4		10.5	10
63	F	60	180		115	116	56	150	7		n° 8	11	12
	F1		180		115	86	26	150	5		n° 7	11	11
	F2		200		130	102	42	165	6	n° 4		11	11
75	F	60	200		130	111	51	165	6		n° 7	13	13
	F1		200		130	85	25	165	6		n° 7	13	13
	F2		175		115	116	56	150	6	n° 4		11	12
	F3		175		115	85	25	150	5	n° 4		11	12
	F3A		160		110	85	25	130	5	n° 4		11	12
	F4		160		110	101	41	130	6	n° 4		11	12

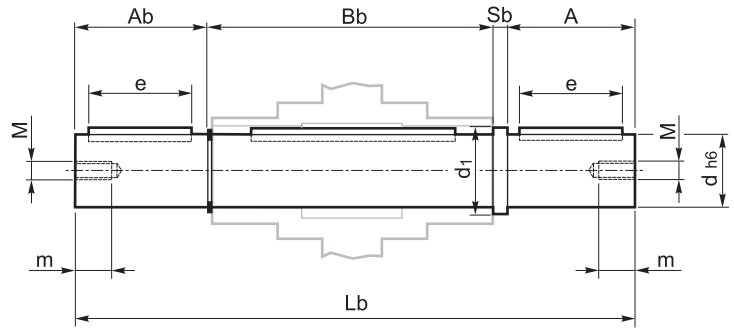
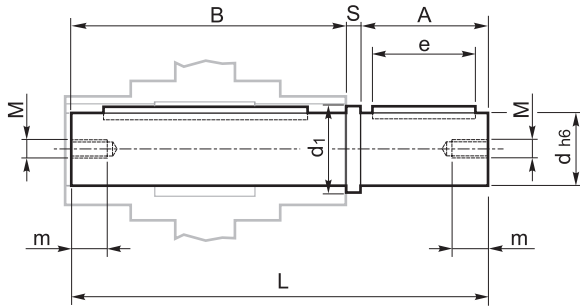
4.9 Accesorios

4.9 Accessories

4.9 Accessoires

Eje lento standard / Single output shaft / Arbre lent simple

Eje lento doble / Double output shaft / Arbre lent double

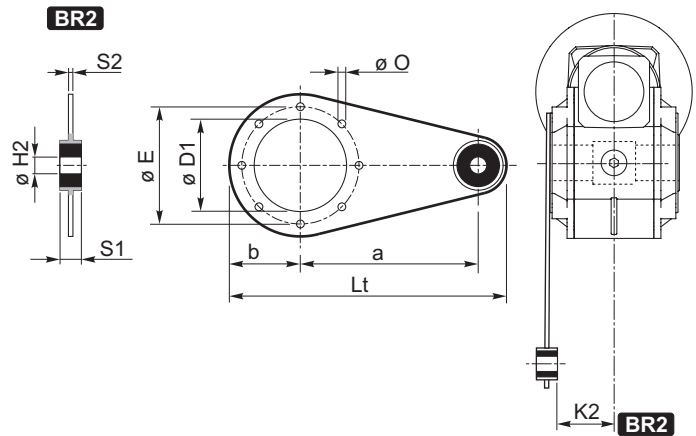


BFK BRK	A	Ab	B	Bb	d (h6)	d1	e	L	Lb	M	m	S	Sb
30	30	29	52	56	14	18.5	20	84.5	117.5	M6	16	2.5	2.5
40	40	39	62	65.2	18	24.5	30	105	147.2	M6	16	3	3
50	60	59	80	83.2	25	29.5	50	143.5	205.7	M8	22	3.5	3.5
63	60	59	119	121.2	25	29.5	50	183	244.2	M8	22	4	4
75	60	59	119	121.5	28	34.5	50	183	244.5	M8	22	4	4

Brazo de reacción / Torque arm / Bras de réaction

BR2 Con casquillo / With bush / Avec boucle

BFK BRK	a	b	D1	E	H2	K2	Lt	O	S1	S2
30	100	40	50	65	8	24.5	157.5	7	15	4
40	100	40	50	65	8	32.5	157.5	7	15	4
50	100	55	68	94	8	38.5	175	7	15	4
63	150	55	75	90	10	38	233	9	20	6
75	200	63	90	110	10	36.5	300	9	25	6

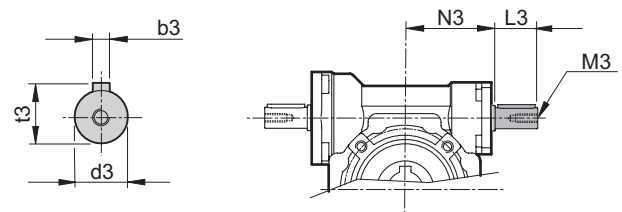
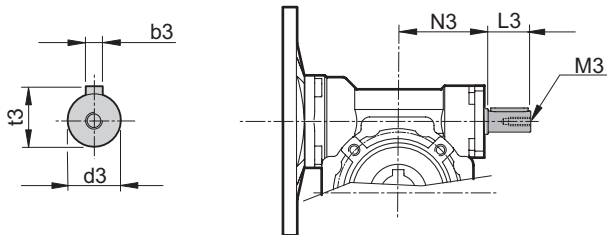


Entrada suplementaria
(tornillos con doble salida)

Additional input
(double extended input shaft)

Entrée supplémentaire
(double vis)

S.e.A.



BFK	d3 (j6)	L3	M3	N3	b3	t3
30	9	15	M4x10	42.5	3	10.2
40	11	20	M4x12	52.5	4	12.5
50	14	25	M5x13	62.5	5	16
63	19	30	M8x20	72.5	6	21.5
75	24	40	M8x20	89	8	27

BRK	d3 (j6)	L3	M3	N3	b3	t3
30	9	20	M4x10	42.5	3	10.2
40	11	22	M4x10	52.5	4	12.5
50	14	30	M5x13	62.5	5	16
63	18	45	M6x16	72.5	6	20.5
75	19	40	M6x16	89	6	21.5

Opciones disponibles:

Available options:

Options disponibles :

Cojinetes de rodillos conicos engranaje

Tapered roller bearing for worm wheel

Cojinetes de rodillos conicos engranaje



4.10 Limitador de par agujero pasante

El limitador de par se aconseja en todas las aplicaciones donde requieran una limitación en el par transmisible para la protección de la instalación y/o preservar el reductor de sobrecargas o golpes inesperados.

Es un dispositivo dotado de eje con agujero pasante, su funcionamiento en fricción, integrado en el reductor y ocupa un espacio limitado.

Realizados para trabajar en baño de aceite, el dispositivo resulta fiable en el tiempo y es exente a usar si no es mantenido en condiciones prolongadas de deslizamiento (condiciones que se verifican cuando el par tiene valores superiores a los del calibrado).

El calibrado es fácilmente regulable desde el externo, a través de la sujeción de una abrazadera autoblocante que comprime los cuatro resortes a taza dispuestos entre ellos en serie.

El dispositivo no permite:

- El uso de cojinetes de rodillos cónicos en salida
- funcionamiento prolongando en condiciones de deslizamiento.

En la siguiente tabla se detallan los valores de los pares de deslizamiento M_{2S} en función del n° de giros de la abrazadera.

Los valores para calibrar tienen tolerancia del $\pm 10\%$ con referencia a la condición estática.

En condiciones dinámicas se note que el par de deslizamiento asume valores distintos según el tipo y/o modalidad en el cual se verifica la sobrecarga: con valores mayores en caso de cargas uniformemente creciente, con respecto a pesos menores, se debe a picos imprevistos de cargas.

NOTA: Cuando se superan los valores de calibre se obtiene el deslizamiento. El coeficiente de fricción entre la superficie de contacto del estático deviene dinámico y el par transmitido baja aproximadamente un 30%.

De hecho es oportuno anticipar un stop para así poder iniciar con los valores de base del calibrado.

Es importante notar que el par de deslizamiento no es siempre el mismo durante la vida del limitador.

De hecho tiende a disminuir en relación al número y a su durabilidad de los deslizamientos, que rodando las superficies de contacto, aumenta el rendimiento.

Entonces es aconsejable verificar periódicamente, sobretodo durante la fase de rodaje, el calibre del dispositivo.

Allí donde se exige un error mayor de contenido en la calibración, es necesario probar el par transmisible en la instalación.

El dispositivo se entrega calibrado al par referido en el catálogo como T_{2M} excepto distintas indicaciones que se expresan ordenadamente en fase.

4.10 Torque limiter with through hollow shaft

The use of a torque limiter is advisable when the application requires the limitation of the transmissible torque to safeguard the plant and/or the gearbox from unexpected or undesired overloads.

The torque limiter is equipped with a through hollow shaft and a friction clutch. It is integrated in the gearbox, therefore space requirement is limited.

Designed to be working in oil bath, the device is reliable over time and is not subject to wear unless in case of operation with prolonged slipping (it occurs when the torque values are higher than the calibration values).

Calibration can be easily adjusted from outside by tightening of the self-locking ring nut, which causes the compression of the 4 Belleville washers arranged in series.

The device does not go together with:

- *the use of tapered roller bearings at output*
- *prolonged operation under slipping conditions*

The following table shows the values of M_{2S} slipping torques depending on the number of revolutions of the ring nut.

Calibration values feature a $\pm 10\%$ tolerance and refer to static conditions.

Under dynamic conditions the values of the slipping torque will change according to the type of overload: the values are higher if the load increase is uniform; the values are lower if sudden load peaks occur.

NOTE: *Slipping occurs when the setting values are exceeded.*

The friction coefficient between the contact surfaces from static becomes dynamic and the transmitted torque is approx. 30% lower.

It is advisable to have a stop first in order to have a restart based on the initial setting value.

It is important to note that the slipping torque is not the same for the whole life of the torque limiter.

It usually decreases in connection with the numbers and the duration of the slipping which because of the surfaces' lapping will increase the efficiency.

For this reason it is advisable to check the calibration of the device at regular intervals, specially during the running-in period.

Should a smaller calibration error be required, it is necessary to test the transmissible torque on the plant.

The device is supplied already calibrated at the torque reported in the catalogue T_{2M} , unless otherwise specified in the order.

4.10 Limiteur de couple creux continu

Le limiteur de couple est conseillé pour toutes les applications qui nécessitent une limitation sur le couple transmissible pour protéger la machine et/ou préserver le réducteur en évitant les surcharges ou les chocs.

Le limiteur fonctionne à friction et il est doté d'un arbre creux continu. Il est, de plus, intégré au réducteur, ce qui offre un encombrement limité.

Conçu pour fonctionner en bain d'huile, le dispositif est fiable sur la durée et il ne s'use pas, sauf en cas de glissement prolongé (condition qui se vérifie lorsque le couple présente des valeurs supérieures à celles du calibrage).

Le calibrage se fait facilement depuis l'extérieur en serrant une frette autobloquante qui comprime les 4 rondelles Belleville disposées en série.

Le dispositif ne permet pas :

- l'utilisation de roulements coniques à la sortie
- le fonctionnement prolongé en condition de glissement.

Dans le tableau ci-dessous sont reportées les valeurs des couples de glissement M_{2S} en fonction du nombre de tours de la frette.

Les valeurs de calibrage ont une tolérance de $\pm 10\%$ et se réfèrent à une condition statique.

Il faut noter qu'en conditions dynamiques le couple de glissement a des valeurs différentes suivant le type et/ou les modalités de surcharge : les valeurs sont plus élevées si la charge augmente de manière continue, mais elles sont plus basses si l'on a une augmentation soudaine de la charge.

REMARQUE : il y a glissement lorsque la valeur de calibrage est dépassée. Le coefficient de frottement entre les surfaces passe de statique à dynamique et le couple transmis chute d'environ 30%. Il est donc recommandé de s'arrêter afin de pouvoir repartir sur la base du calibrage initial.

Il est important de remarquer que le couple de glissement change au fur et à mesure de l'utilisation du limiteur.

Il a en effet tendance à diminuer par rapport au nombre et à la durée des glissements qui, en rodant les surfaces de contact, en augmentent le rendement.

Il est donc conseillé de régulièrement vérifier, surtout pendant la phase de rodage, le calibrage du dispositif.

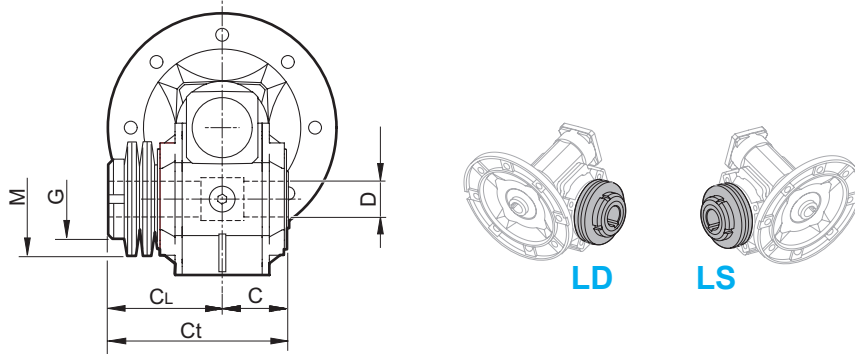
Si une erreur minime est réclamée pour le calibrage, il est nécessaire de tester le couple transmissible sur la machine.

Le dispositif est livré calibré sur le couple reporté T_{2M} dans le catalogue, sauf suite à une demande spécifique faite au moment de la commande.

4.10 Limitador de par
agujero pasante

4.10 Torque limiter with through
hollow shaft

4.10 Limiteur de couple
creux continu



BFK BRK	C	CL	Ct	D (H8)	M	G
63	60	97	157	25	71x40.5x2	M40X1.5
75	60	100	160	28 (30)	90x51x2.7	M50X1.5

() A petición / On request / Sur demande

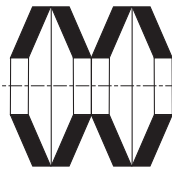
La versión con limitador no se incluyen los ejes lentos.
El dispositivo se entrega calibrado al par referido en el catálogo como T_{2M} excepto distintas indicaciones que se expresan ordenadamente en fase.

*The version with torque limiter is supplied without output shafts.
The device is supplied already calibrated at the torque reported in the catalogue T_{2M}, unless otherwise specified in the order.*

Les arbres lents ne sont pas fournis dans la version avec limiteur.
Le dispositif est livré calibré sur le couple reporté T_{2M} dans le catalogue, sauf suite à une demande spécifique faite au moment de la commande.

BFK BRK	N°. giri della ghiera di regolazione / N°. revolutions of ring nut / Nr. Umdrehungen der Mutter													
	1	1 1/4	1 1/2	1 3/4	2	2 1/4	2 1/2	2 3/4	3	3 1/4	3 1/2	3 3/4	4	4 1/4
63		80	90	100	110	120	130	140	150	160	170	180	190	200
75	140	160	180	200	220	240	260	280	300					

Disposición de los resortes
Washers' arrangement
Position des rondelles



EN SERIE (min. par, max. sensibilidad)
SERIES (min. torque, max sensitivity)
EN SÉRIE (min. couple, max. sensibilité)