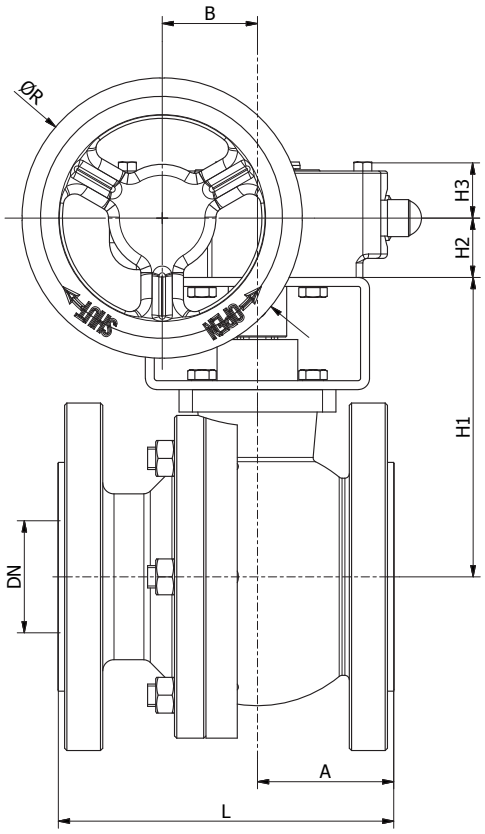
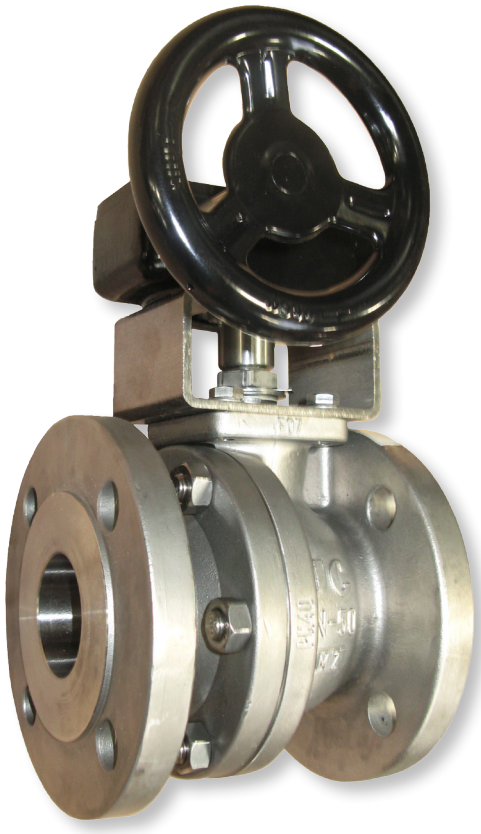
BALL VALVE - 540 SERIES
Gearbox

FIGURE:
540AITR: Ball valve in steel, with gearbox
540IITR: Ball valve in stainless steel, with gearbox





DIMENSIONS: (mm)

DN	QR	L	A	B	ØR	H1	H2	H3	Kg
65	150	170	76	42,5	125	157	28,6	25,9	19,7
80	210	180	75	52,0	160	171	28,6	34,4	27,9
100	210	190	91	52,0	160	213	28,6	34,4	40,3
125	550	325	120	71,0	300	236	40,5	47,5	68,0
150	550	350	135	71,0	300	263	40,5	47,5	94,6

The gearbox is calculated with a safety factor of 30% and max. differential pressure of 40 bar.
For standard working conditions.

OPTIONS:
Limit switches, locking device, chainwheel.

FLANGED BALL VALVE
540 SERIES - PN 40

GENERAL FEATURES:

- Split body - floating ball - full bore - blow out proof stem
- Anti-static device according to BS 5351, ISO 7121 and NF E29-470
- Cavity balancing hole (standard= 5 mm diameter) in the top of the ball avoids overpressure in the cavity
- All valves meet the TA Luft requirements
- DIN 3357 and Fire Safe
- Max. temperatures: -29°C ~ 230°C (AIT) and -50°C ~ 230°C (IIT)

Fire safe tested

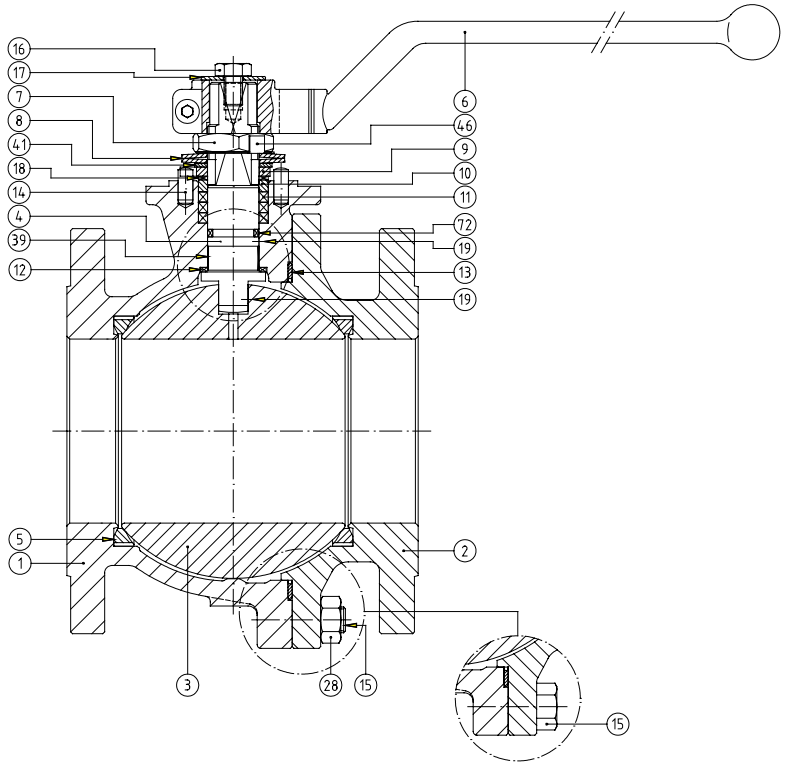
CE

TÜV
TA Luft

ATEX

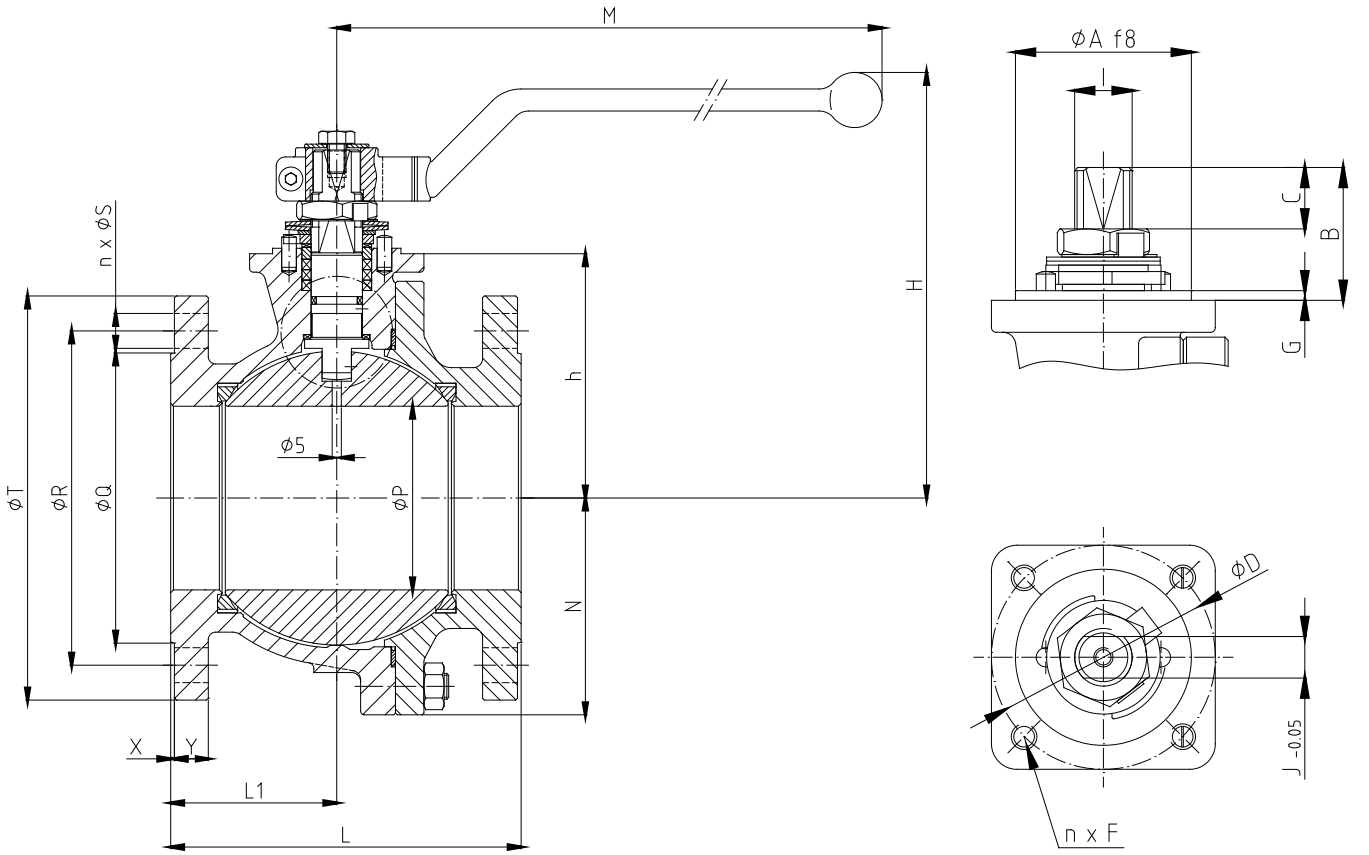
DESIGN STANDARDS	
Valves design	DIN 3357, EN 1983
Body design	DIN 3840
Shell thickness	BS 5351
Flanges	DIN 2501, EN 1092-1
Face to face dimensions	DIN 3202 F18, EN 558-1 Series 27
Actuator mounting flange	ISO 5211, DIN 3337
Shell finishing quality	MSS SP 55
Marking	BS 5351, EN 19, CE-PED
TESTS AND CERTIFICATES	
Quality Assurance	ISO 9001, CE-PED
Fire Safe certification	BS 6755 Part 2, ISO 10497: 2004
Pressure testing	DIN 3230, BS 6755 Part 1, EN 12266, NF E 29-203
Other	ISO 14001, ATEX

FLANGED BALL VALVE
540 SERIES - Materials



Item	Description	Materials	
		AIT	IIT
1	Body	1.0619	1.4408
2	Body connector	1.0619	1.4408
3	Ball	A 351 Gr. CF8M (DN 15 : 25 A 479 Tp.316)	
4	Stem	A 479 Tp.316	
5	Seat ring	PTFE	
6	Wrench	Nodular Iron	
7	Gland nut	Zinc plated carbon steel	AISI 303
8	Disk spring	Carbon Steel	Stainless steel A666
9	Stop plate	Carbon Steel	AISI 304
10	Gland	AISI 303	AISI 316
11	Gland packing	Graphite	
12	Stem thrust seal	25% G.F. PTFE	
13	Body connector seal	AISI 316L + PTFE + Graphite	
14	Stop pin	Carbon Steel	Stainless steel
15	Bolt (DN 32 to DN 100 stud)	DIN 933 Gr.8.8	DIN 933 A4-70
16	Bolt	DIN 933 A4-70	
17	Washer	Zinc plated carbon steel	AISI 304
18	Thrust washer	25% G.F. PTFE	
19	Antistatic device	Stainless Steel	
28	Nut (DN 32 to DN 100)	DIN 934 Gr.8	DIN 934 A4-70
39	Stem bushing (DN 25 to DN 200)	25% G.F. PTFE	
41	Spacer (DN 40 to 200)	Carbon Steel	AISI 304
46	Washer	AISI 304	
72	"O" Ring	FKM	

FLANGED BALL VALVE
540 SERIES - Dimensions



DIMENSIONS: (in mm)

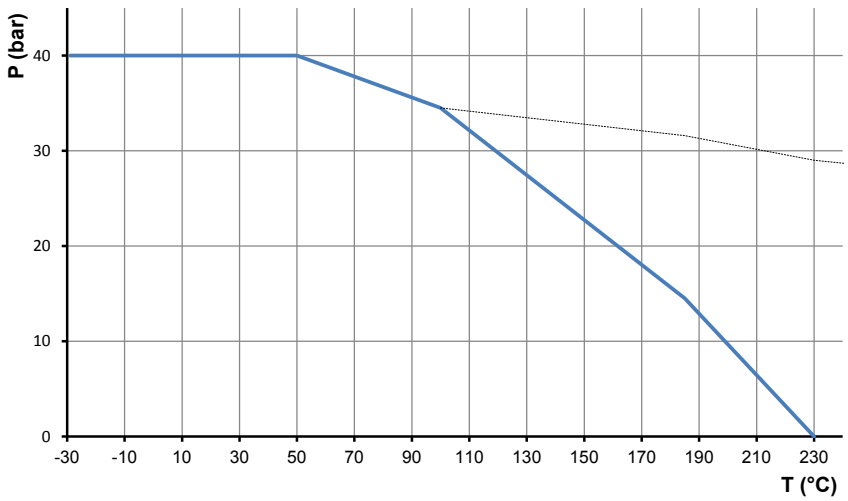
DN	Ø P	L	L1	Ø Q	Ø R	n x Ø S	Ø T	X	Y	h	N	H	M	Kg
65	65	170	76	122	145	8x18	185	3	19	97	-	169	213	17,0
80	80	180	75	138	160	8x18	200	3	21	111	-	207	348	23,0
100	100	190	91	162	190	8x22	235	3	21	133	118,0	231	445	35,0
125	125	325	120	188	220	8x26	262	3	23	156	137,5	262	698	57,0
150	151	350	135	218	250	8x26	300	3	25	183	160,0	298	698	83,5

ACTUATOR CONNECTION: (in mm)

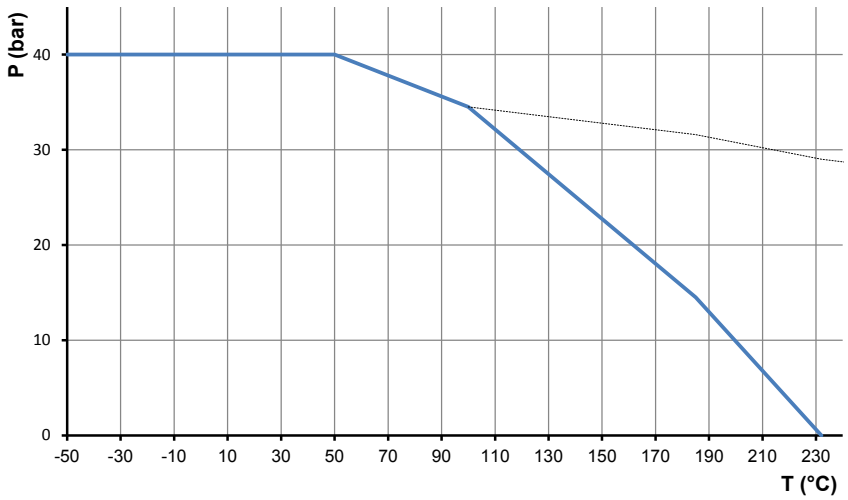
DN	ISO	Ø A	B	C	Ø D	n x F	G	I	J
65	F07	55	44,0	19,7	70	4x M8	3,0	M22x1.5	16
80	F10	70	44,5	19,7	102	4x M10	3,0	M25x1.5	18
100	F10	70	56,5	29,2	102	4x M10	3,0	M28x1.5	20
125	F12	85	56,0	27,6	125	4x M12	3,0	M35x2	25
150	F12	85	68,0	38,5	125	4x M12	3,0	M40x2	29

PRESSURE-TEMPERATURE CHART:

AIT



IIT



TORQUES: (in Nm)

DN	Differential pressure
	40 bar
65	70
80	116
100	169
125	248
150	492

Kv VALUE: (in m³/h)

DN	Kv value
65	550
80	1.000
100	1.650
125	3.000
150	4.200

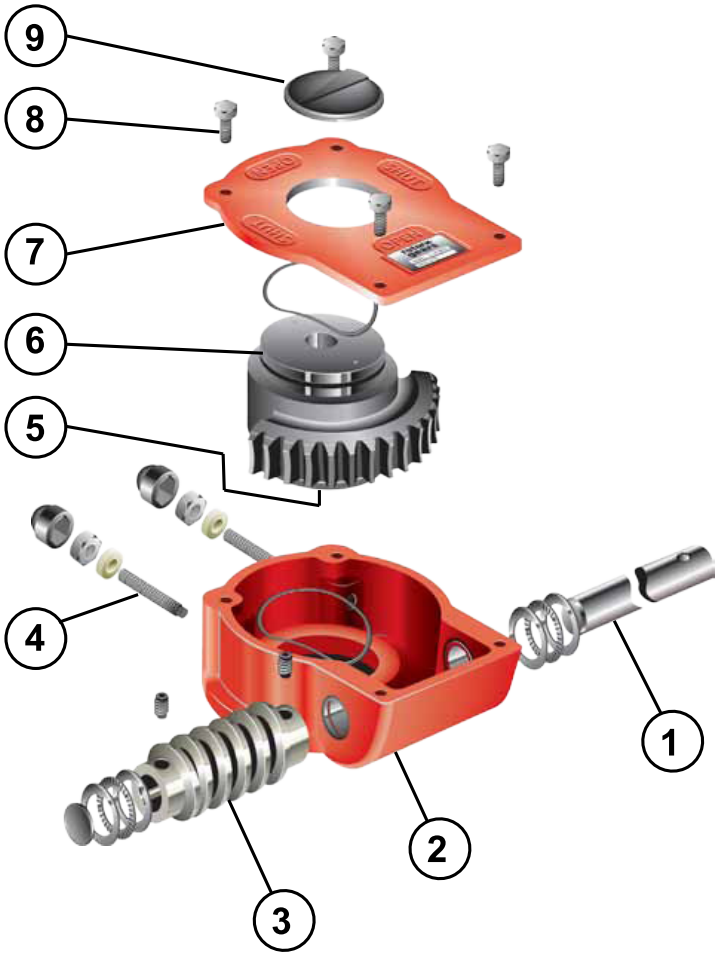
GEARBOX
FIG. QR

GENERAL FEATURES:

- Quarter turn gearbox for the operation of ball, butterfly and plug valves
- Body in cast iron
- Mounting flange acc. to ISO 5211
- Removable stem drive inserts for 45° and 90° positions
- Temperature range: -20°C ~ +120°C
- Built in mechanical stops (± 5°)
- IP 67

ATEX

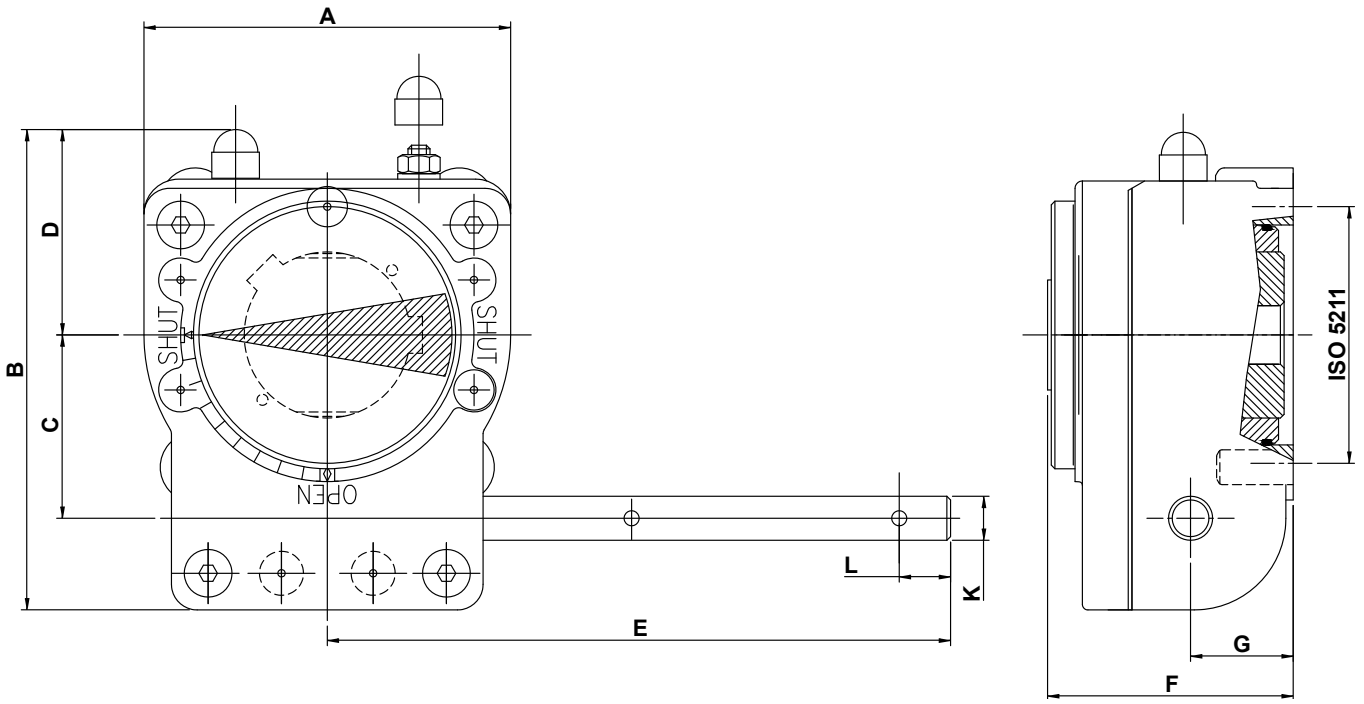
Type	Ratio	Output torque (Nm)	Input torque (Nm)	Kg
QR-150	40 : 1	150	16	2
QR-210	37 : 1	330	28,5	4
QR-215	37 : 1	500	43	4
QR-550	34 : 1	1000	83	9
QR-880	38 : 1	2000	152	14
QR-1250	55 : 1	3250	171	22



MATERIALS:

Pos.	Description	Material
1	Shaft	Steel
2	Body	Cast iron GG25
3	Worm	Carbon steel C45
4	Screws	Steel ELVZ 8.8
5	Insert	Sintered steel
6	Quadrant	Ductile iron GGG 40
7	Coverplate	Cast iron GG25
8	Screws	Steel ELVZ 8.8
9	Position indicator	Polypropylene

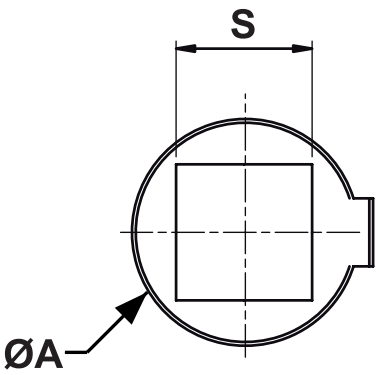
GEARBOX
Dimensions - FIG. QR



DIMENSIONS: (mm)

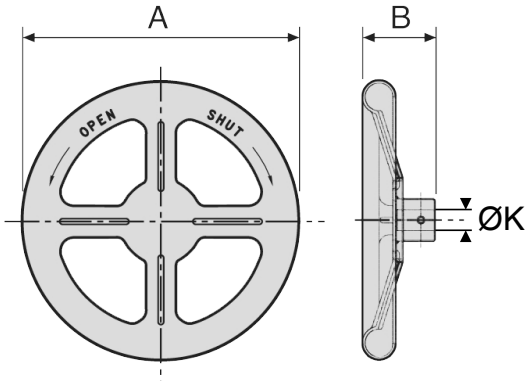
Type	A	B	C	D	E	F	G	ØK	L	ISO 5211	Handwheel
QR-150	80	124	58	42,5	99,5	54,5	26,5	12	14	F05 - F07	PS125-12
QR-210	102	127,5	48	52	159	63	28,6	15	14	F05 - F07 - F10	PS160-15
QR-215	102	127,5	48	52	159	63	28,6	15	14	F05 - F07 - F10	PS200-15
QR-550	138	174	69	71	201	88	40,5	20	24	F10 - F14	SG300-20
QR-880	200	226	100	86	189	92,5	42	20	24	F10 - F14	SG500-20
QR-1250	220	258	110	104,5	230	102	-	20	24	F12 - F16 (F25 on demand)	SG600-20

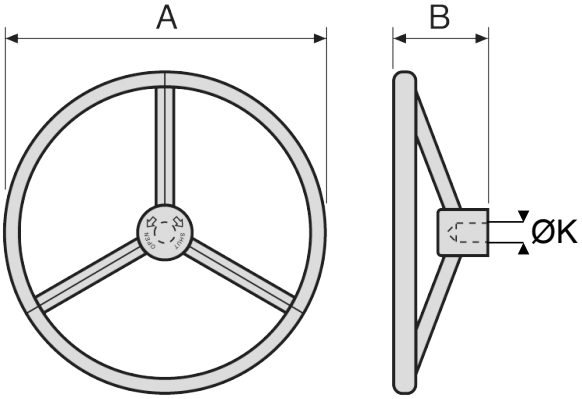
INSERTS



Gearbox type	Insert type	ØA	S
QR-150	005VK08	25	8
QR-150	005VK09	25	9
QR-150	005VK11	25	11
QR-150	005VK14	25	14
QR-210	007VK14	32,15	14
QR-210	007VK17	32,15	17
QR-215	007VK14	32,15	14
QR-215	007VK17	32,15	17
QR-550	010VK17	45,3	17
QR-550	010VK19	45,3	19
QR-550	010VK22	45,3	22
QR-550	010VK27	45,3	27
QR-880/1250	150VK17	60	17
QR-880/1250	150VK19	60	19
QR-880/1250	150VK22	60	22
QR-880/1250	150VK27	60	27
QR-880/1250	150VK30	60	30
QR-880/1250	150VK36	60	36

HANDWHEELS





Type PS	ØK	ØA	B
PS100-12	12	100	35
PS125-12	12	125	34
PS125-15	15	125	48
PS160-12	12	160	48
PS160-15	15	160	49
PS200-12	12	200	51
PS200-15	15	200	52
PS200-20	20	200	63
PS250-12	12	250	63
PS250-15	15	250	63
PS250-20	20	250	70

Type SG	ØK	ØA	B
SG150-12	12	150	80
SG150-15	15	150	80
SG200-12	12	200	80
SG200-15	15	200	80
SG200-20	20	200	80
SG250-12	12	250	110
SG250-15	15	250	110
SG250-20	20	250	110
SG300-15	15	300	115
SG300-20	20	300	115
SG400-15	15	400	130
SG400-20	20	400	130
SG500-20	20	500	150
SG600-20	20	600	150