



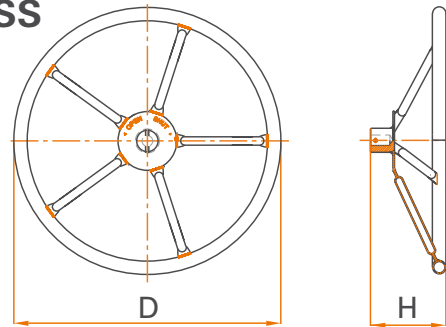
# PRO-GEAR QSS SERIES

## HANDWHEELS "WSS (WELDED) SERIES"

TYPE	D	H
WSS 160	Ø 160	54
WSS 200	Ø 200	67.5
WSS 250	Ø 250	73
WSS 300	Ø 300	102
WSS 400	Ø 400	122
WSS 500	Ø 500	141
WSS 600	Ø 600	157

Dimensions mentioned in mm.

### WSS



How to size the diameter of the handwheel:

- 1 Get the output torque required

$$\text{Handwheel diameter} = \left( \frac{\text{Output Required}}{\text{M.A.}} \right) \times 5^*$$

- 2 Select the Handwheel diameter

\* RIM pull 400 Nm

## THE POWER IS YOURS!

Pro-Gear GmbH is a young, highly flexible team, who are carrying out every element of design, assembly and quality control with the utmost care.

The unique combination of the products, together with the know how and assembling facilities are creating for clients a relationship, unique in the valve actuator industries.



GOST certificated



ISO certificated



Kopenhagener Straße 21  
 D-48455 Bad Bentheim - Gildehaus  
 Tel +49 (0)5924 255 840 - Fax +49 (0)5924 255 841  
 E-mail info@pro-gear.de - www.pro-gear.de



**Pro-Gear**  
VALVE ACTUATORS

# THE POWER IS YOURS!



## PRO-GEAR QSS SERIES

HOUSING  
INPUT SHAFT  
QUADRANT  
WORM  
STROKE ADJUSTMENT  
INDICATOR



**MGMT. SYS.**  
RvA C 248



# PRO-GEAR QSS SERIES

The Pro-Gear Series “QSS” quarter turn gearboxes are rugged, industrial products, manufactured with a stainless steel 316 housing. All models in this series feature aluminium bronze (AB2) quadrants, as well as teflon coated high performance bearings. All other main components which are exposed to a corrosive environment, such as the inputshaft, the position indicator and the studnuts, are also made from stainless steel 316.

## APPLICATIONS

The QSS series is highly suitable for all applications in highly corrosive environments such as pharmaceutical plants, chemical plants, off-shore industries and marine services. The QSS series are intended for the operation of ball, plug and butterfly valves as well as power and process dampers. The usage of high grade materials provides a tough, reliable and highly corrosive resistant unit for the automation of valves in today’s highly demanding industries. The handwheels which allow a smooth operation are available in a variety of sizes and are made of stainless steel 316 only. This QSS series is also applicable with several other applications such as padlocking devices, limitswitchboxes and memory stops.



## PERFORMANCE SPECIFICATIONS

- > 6 Models
- > Up to 6.500 Nm. Torque range
- > -5° to 95° stroke
- > IP68 sealing
- > Temperature range: -25 °C to +110 °C  
(lower / higher temperature ranges on request)

TYPE	RATIO	TORQUE (Nm)		M.A. ± 10%	WEIGHT (Kg)
		OUTPUT	INPUT		
QSS-400 S	44 : 1	400	31.25	12.8	4.72
QSS-800 S	40 : 1	800	60	13.3	8.48
QSS-1500 S	42 : 1	1.500	122.95	12.2	11.59
QSS-2000 S	48 : 1	2.000	131	15.3	16.07
QSS-4000 S	72 : 1	4.000	185	21.6	39.78
QSS-6500 S	267 : 1	6.500	95	68.4	46.41

1Nm=0,737562 lbf.ft. 1Nm=8,8507 lbf.ins. [Converting International Units to British Units]

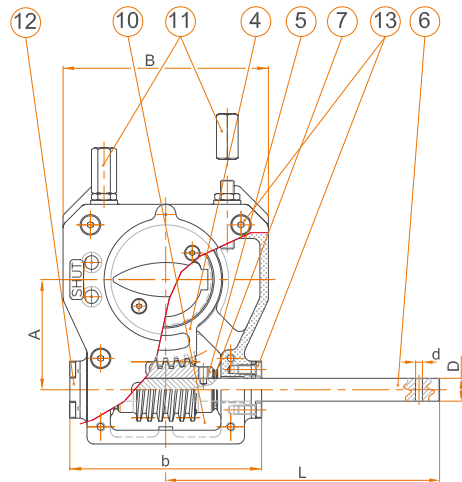
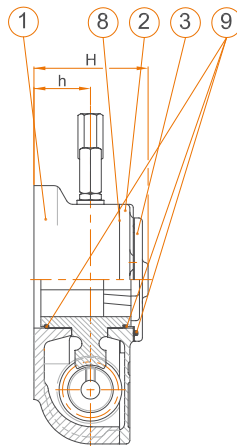
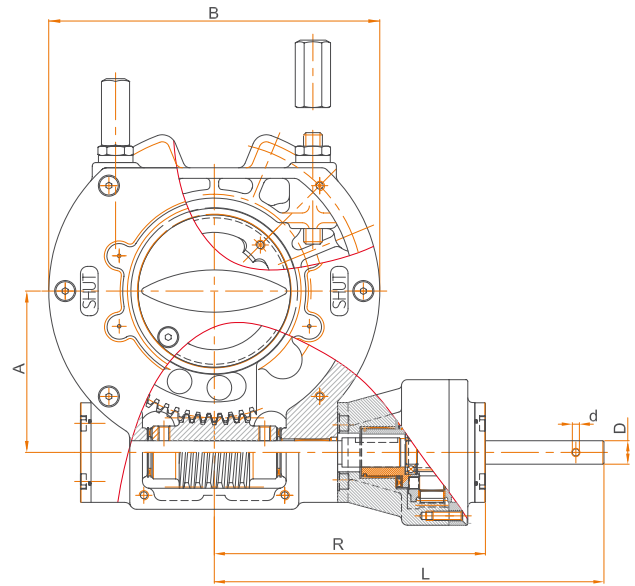
## FEATURES

- > Stainless Steel 316 input shaft
- > Stainless Steel 316 fasteners
- > Stainless Steel position indicator
- > Flange standardised according to DIN / ISO 5211
- > 6 Models up to 6.500 Nm output
- > Axial needle bearings
- > NBR 70 gasket material
- > Sealed position-indicator
- > Carefully chosen ratio's are increasing the MA-rates
- > Blind tapped PCD's



### PARTS / MATERIALS LIST PRO-GEAR QSS SERIES

PART NO	DESCRIPTION	MATERIAL	SPECS / STANDARD
1	Body	Stainless steel - 316	Werkstoffnr. 1.4401 - ASTM /AISI-316
2	Coverplate	Stainless steel - 316	Werkstoffnr. 1.4401 - ASTM /AISI-316
3	Pos. Indicator	Stainless steel - 316	Werkstoffnr. 1.4401 - ASTM /AISI-316
4	Quadrant	Aluminium Bronze	CC333G / ASTM C95800 / AB2
5	Worm	Carbon steel	C45-K
6	Shaft	Stainless steel - 316	Werkstoffnr. 1.4401 - ASTM /AISI-316
7	Axial needle bearing		
8	Gasket	Nitrile/silicone	NBR-65° shore
9	O-rings	Nitrile	NBR-65° shore
10	Grease	Complex EP-0	DIN KG0G0.5N-30 ISO-LXCDIB0.5
11	Stud nuts	Stainless steel - 316	Werkstoffnr. 1.4401 - ASTM /AISI-316
12	Closing plates	Stainless steel - 316	Werkstoffnr. 1.4401 - ASTM /AISI-316
13	Fasteners	Stainless steel	Werkstoffnr. 1.4401 - A4



GEARBOX	TYPE	A	b	B	d	D	h	H	L	R	VALVE CONNECTION ACC ISO 5211			
QSS-400	MM	52.5	105	112	4	12	34	74.75	168	-	70 (F07)	102 (F10)		
	INCH	2.07	4.13	4.41	0.16	0.47	1.34	2.94	6.61	-	2.76	4.02		
QSS-800	MM	68.75	128	135	5	15	42.5	90.5	213	-	70 (F07)	102 (F10)	125 (F12)	
	INCH	2.71	5.04	5.31	0.20	0.59	1.67	3.56	8.39	-	2.76	4.02	4.92	
QSS-1500	MM	84	147	156	6	20	45	97	214	-	102 (F10)	125 (F12)	140 (F14)	
	INCH	3.31	5.79	6.14	0.24	0.79	1.77	3.82	8.43	-	4.02	4.92	5.51	
QSS-2000	MM	96.5	168	180	6	20	50	100	226	-	102 (F10)	125 (F12)	140 (F14)	165 (F16)
	INCH	3.80	6.61	7.09	0.24	0.79	1.97	3.94	8.90	-	4.02	4.92	5.51	6.50
QSS-4000	MM	137.5	228	282	6	20	54.5	128	300	-	165 (F16)	254 (F25)		
	INCH	5.41	8.98	11.10	0.24	0.79	2.15	5.04	11.81	-	6.50	10.00		
QSS-6500	MM	137.5	219	282	6	20	54.5	128	332	231	165 (F16)	254 (F25)		
	INCH	5.41	8.62	11.10	0.24	0.79	2.15	5.04	13.07	9.09	6.50	10.00		