

1/2" – 6" RP (red. port)

SCP Cylindrical Plug Valves are ideally suited for Shut-off, Flow Control and Throttling of corrosive, abrasive or even toxic process media in either liquid or gaseous state.

Modular Design

Valves are available with handlever for manual quarter turn operation as per standard or with bare shaft for easy installation of actuator units.

The sturdy design bodies are made of cast steel 1.0619 (WCB), epoxy coating RAL 5005 signal-blue or stainless steel casting 1.4408 (CF-8M), with resistant linings such as PFA or PFA-AS (conductive).



Main Features

- Heavy-duty, robust construction, maintenance-free
- Bubble-tight shut-off throughout the full pressure and temperature range
- Cavity-free design, max. permeation protection
- Zero stem leakage provided by an innovative stem sealing mechanism
- Consistent low operating torque through cylindrical plug design and resilient liner/cylinder contact
- Maximum flow rates at lowest pressure drops
- Easy replacement of components on site
- Flange connections acc. to ANSI 150lbs (DIN optional) for installation into existing piping systems

 **Conformity according to European Pressure Equipment Directive 2014/68/EU (PED)**

Operating Options



Standard Valve

Body 1.0619 (WCB)/PFA, bare shaft



Stainless Steel

Body CF-8M/PFA, with handlever

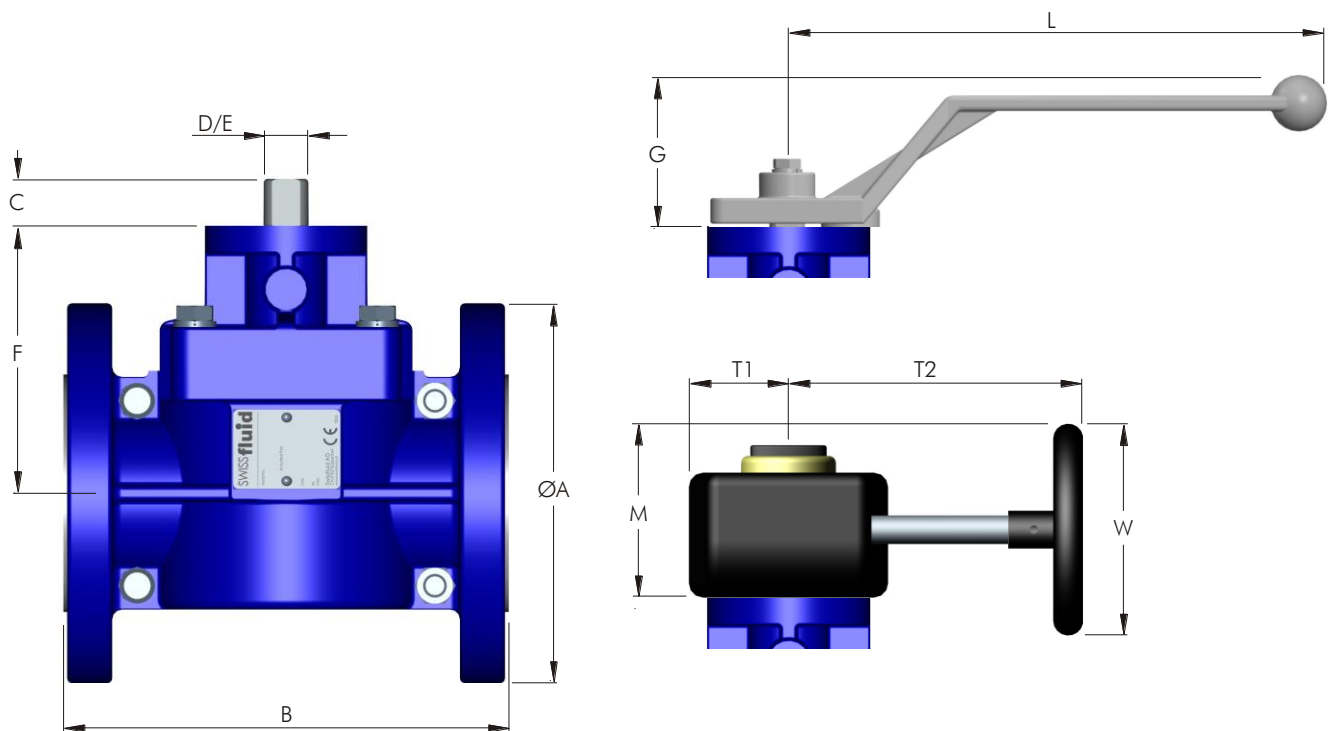
Operating Conditions

- Temperature range from -40°F up to +400°F, depending on lining material
- Pressure range from 0.01 psia up to 232 psi, depending on size/pressure/temperature

Testing / Marking

- Pressure- and tightness testing acc. to EN 12266-1, leakage rate A, resp. API 598.
- Marking of valves on body and name plate acc. to EN 19.
- Material- resp. test certificates acc. to EN 10204-3.1/2.2/2.1

Outline Drawing / Actuator Options



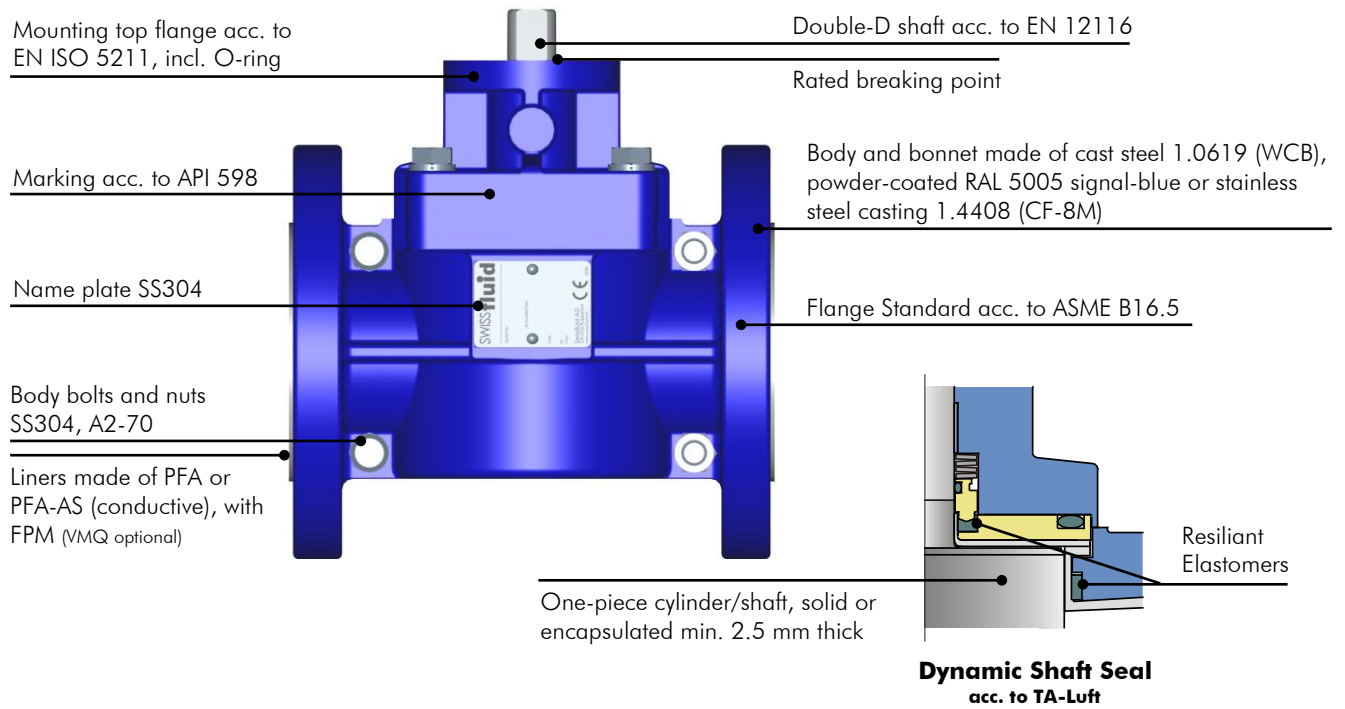
Dimensions inch

Weights lbs

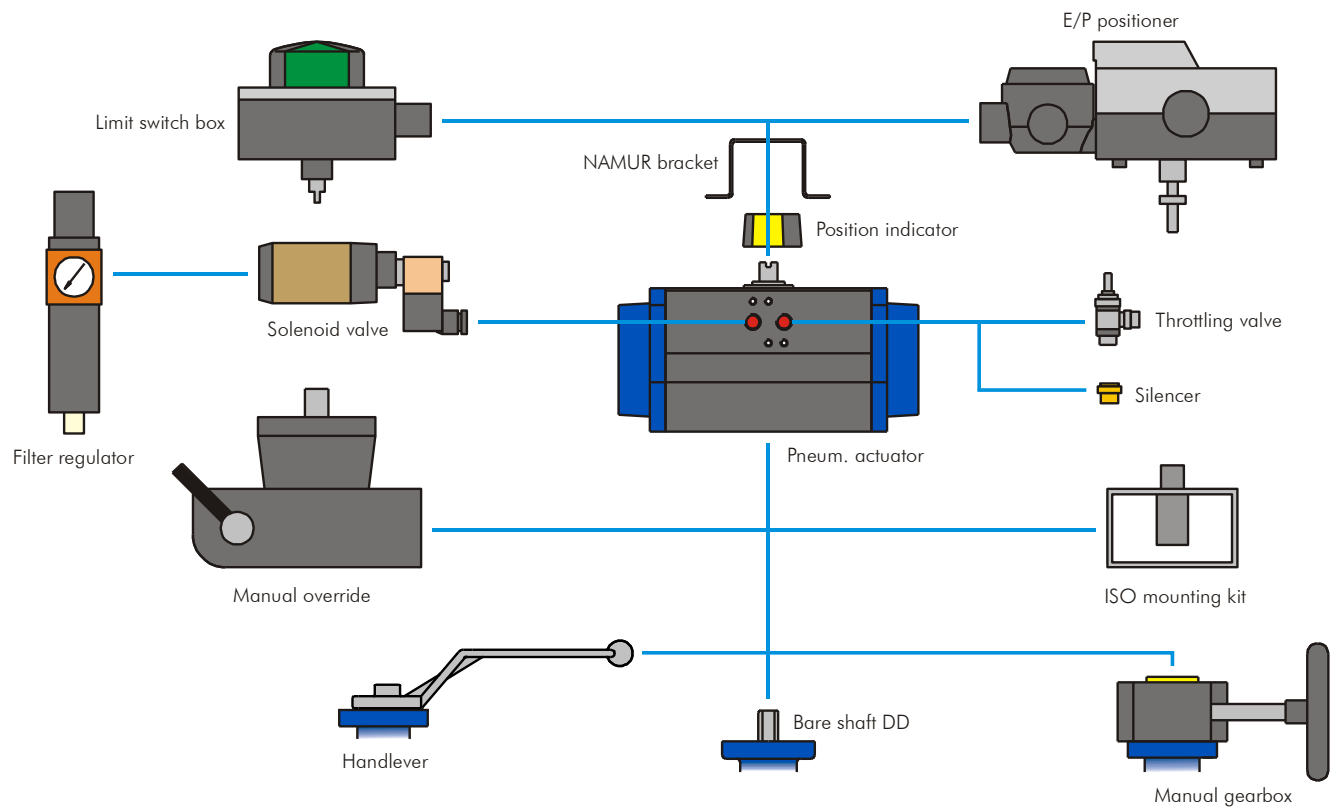
Size nom.	ØA	B	C	D Dia.	E DD	F	G	L	M	T1	T2	W Dia.	ISO Top	Valve only	Lever only	Gear only
1/2"	3.74	5.12	0.75	0.55	0.43	3.39	2.28	8.31	3.54	2.28	4.33	4.92	F05	7.04	0.79	5.06
3/4"	4.13	5.91	0.75	0.55	0.43	3.50	2.28	8.31	3.54	2.28	4.33	4.92	F05	8.36	0.79	5.06
1"	4.25	5.00	0.75	0.55	0.43	3.62	2.28	8.31	3.54	2.28	4.33	4.92	F05	7.92	0.79	5.06
1 1/2"	5.00	6.50	0.75	0.71	0.55	4.02	2.28	9.88	3.54	2.28	4.33	4.92	F07	11.88	0.90	5.06
2"	6.00	7.00	0.75	0.71	0.55	4.21	2.28	9.88	3.54	2.28	4.33	4.92	F07	18.04	0.90	5.06
3" RP	7.50	8.00	0.75	0.71	0.55	4.21	2.28	9.88	3.54	2.28	4.33	4.92	F07	30.36	0.90	5.06
4" RP	9.00	9.00	0.94	0.94	0.67	5.39	2.44	12.40	5.00	2.28	7.87	7.87	F07	50.38	1.98	7.70
6" RP	11.00	10.50	0.94	0.94	0.67	5.79	-	-	5.00	2.28	7.87	7.87	F10	77.00	1.98	7.70

Face to face B acc. to ASME B16.10

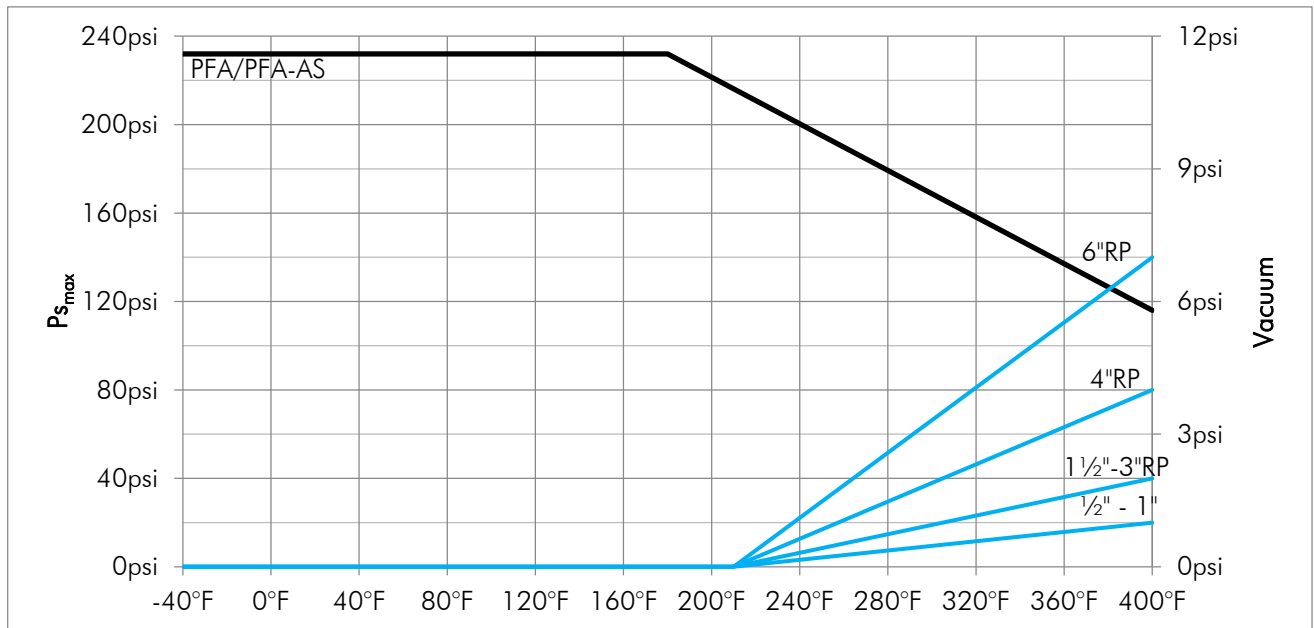
Construction of Valve



Mounting Options



Pressure-/Temperature Diagram



Low temperature or austenitic steels are required for use below 14°F operating temperature.

Torque Values in-lbs

Torque values for PFA-encapsulated cylinder and PFA-liner

Size nom.	1/2"	3/4"	1"	1 1/2"	2"/3" RP	4" RP	6" RP
Torque nom.	177	239	310	372	708	1,328	1,947
max. allowable	1,283	1,283	1,283	2,832	2,832	6,195	6,195

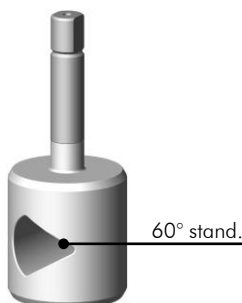
• Stated values to be break-away torques without any consideration of safety factors for actuators.

Flow Rate Values Cv usg/min.

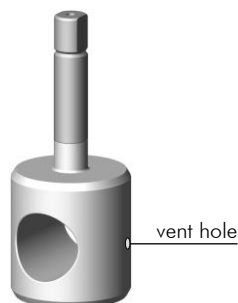
Size nom.	1/2"	3/4"	1"	1 1/2"	2"/3" RP	4" RP	6" RP
Full Port Valve	18	36	70	216	321	930	1,425

Options

V-port Cylinder
for control applications,
with various contours



Vented Cylinder
with drilled vent hole
for upstream pressure relief

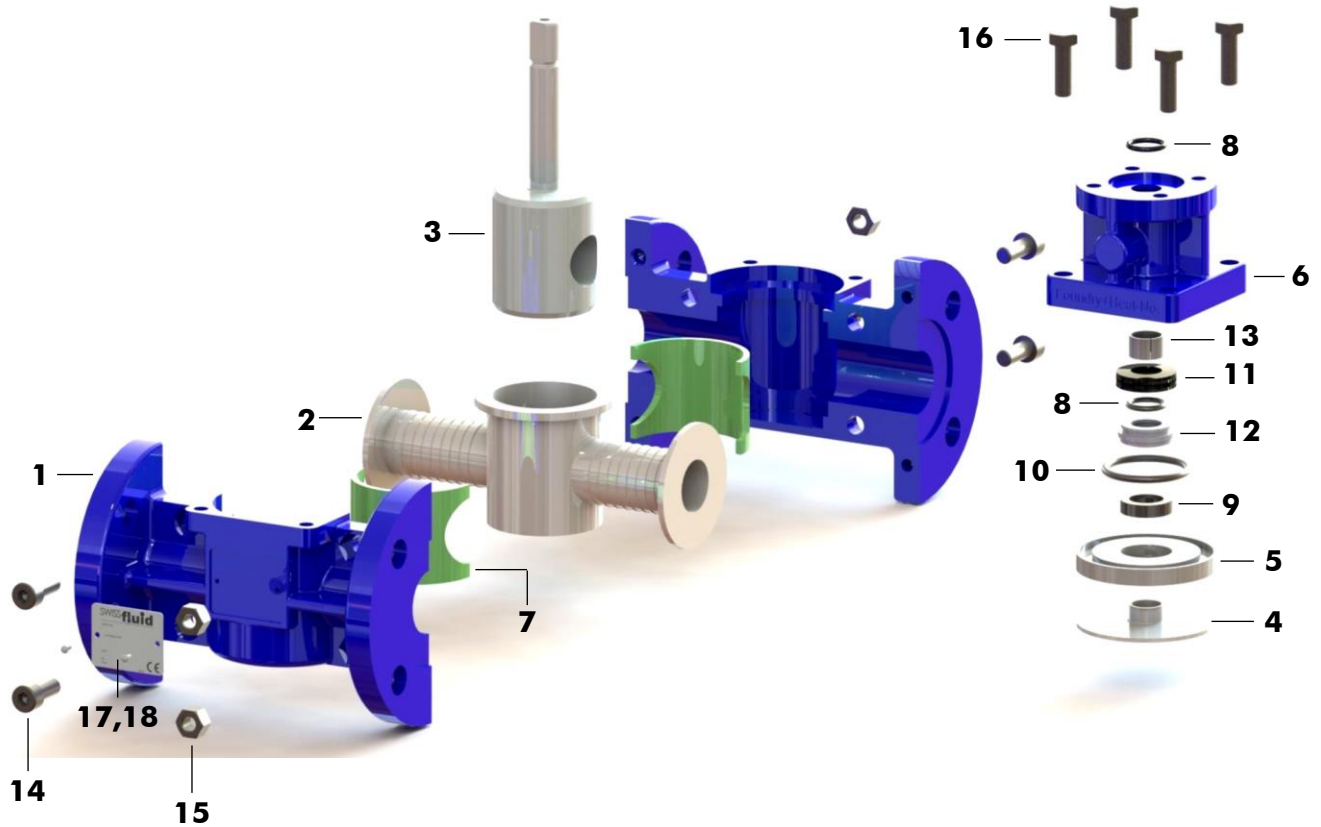


Typical Service Applications

- Chemical CPI
- Petro-Chemical
- Bio-Technical
- Pharmaceutical Industry
- Semi-Conductors
- Pulp and Paper
- Food Processing
- Paint and Pigments
- Fertilizers
- Textile Industry
- Mining and Steel

Standard Version (Picture showing Valve 2"-150lbs, PFA liner, PFA-encapsulated cylinder, bare shaft)

Parts List Manual Valve compl.



Item	Qty.	Description	Material	No.
1	1	Body two-piece, RAL 5005	WCB	1.0619
2	1	Liner	PFA	
3	1	Cylinder encapsulated	Duplex/PFA	1.4462
4	1	Diaphragm	PTFE	
5	1	Pressure Plate	Duplex	1.4462
6	1	Bonnet, RAL 5005	WCB	1.0619
7	2	Elastomer	FPM	
8	2	O-Ring top	FPM	
9	1	Shaft Seal Ring	FPM	
10	1	O-Ring	FPM	
11	4	Belleville Spring	Spring Steel	1.8159
12	1	Pressure Sleeve	SS316L	1.4404
13	1	Bearing DU	C.Steel/PTFE	
14	4	Socket Head Cap Screw	A2-70	1.4310
15	4	Hex. Nut	A2-70	1.4310
16	4	Hex. Head Screw	A2-70	1.4310
17	1	Name Plate 42 x 14 CE	A2	1.4301
18	2	Hammer Screw 2.49 x 4.76	A2	1.4310

Specification

Project-/Customer Data		Inquiry/Date: _____		Ref. SF _____	
Company:	_____	Contact Person:	_____	Phone:	_____
Address:	_____	Function:	_____	Fax:	_____
ZIP/Place:	_____	Department:	_____	E-mail:	_____
Project:	_____	Phone direct:	_____	Mobile:	_____

Operating Conditions

Media / Chemical Composition:

<input type="checkbox"/> liquid	<input type="checkbox"/> powdery	<input type="checkbox"/> crystallizing	<input type="checkbox"/> sticky	<input type="checkbox"/> Spec. Grav. _____
<input type="checkbox"/> gaseous	<input type="checkbox"/> Solids ____ %	<input type="checkbox"/> viscous	<input type="checkbox"/> Flow Velocity _____ ft/sec	
<input type="checkbox"/> abrasive	<input type="checkbox"/> Particle ____ mm	<input type="checkbox"/> Visc. _____ cp	<input type="checkbox"/> Flow Rate _____ usg/min	

Pressure

max. ____ bar
min. ____ bar

Temperature

max. ____ °C
min. ____ °C

Mode

On/Off
 Flow Control
____ cycles/ ____

Installation / Environment

horizontal Room dry
 vertical Room humid
 _____ outdoor

Remarks:

SCP Product Code

Specification of a complete Cylindrical Plug Valve SCP Series

Product code	Nom. size	Flange conn.	Body	Lining body	Elastomer	Cylinder encaps./solid	Shaft end	Options																														
SCP	2"	150#	G10	A85	E68	U85	DD																															
	<table border="1"> <tr><td>1/2" - 2"</td></tr> <tr><td>3"RP - 6"RP</td></tr> <tr><td>DN15 - 100</td></tr> </table>	1/2" - 2"	3"RP - 6"RP	DN15 - 100	<table border="1"> <tr><td>ANSI150#</td></tr> <tr><td>ANSI300#</td></tr> <tr><td>PN16</td></tr> <tr><td>JIS 10K</td></tr> </table>	ANSI150#	ANSI300#	PN16	JIS 10K	<table border="1"> <tr><td>G10 WCB</td></tr> <tr><td>G15 CF-8M</td></tr> </table>	G10 WCB	G15 CF-8M	<table border="1"> <tr><td>A85 PFA</td></tr> <tr><td>A86 PFA-AS</td></tr> </table>	A85 PFA	A86 PFA-AS	<table border="1"> <tr><td>E67 FPM</td></tr> <tr><td>E68 VMQ</td></tr> </table>	E67 FPM	E68 VMQ	<table border="1"> <tr><td>U85 PFA</td></tr> <tr><td>U86 PFA-AS</td></tr> <tr><td>U88 PVDF</td></tr> <tr><td>U89 PP</td></tr> <tr><td>U91 ETFE</td></tr> <tr><td>S32 SS316L</td></tr> <tr><td>S40 Tit. Gr.2</td></tr> <tr><td>S41 Tit. Gr.7</td></tr> <tr><td>S43 Hast. C-276</td></tr> </table>	U85 PFA	U86 PFA-AS	U88 PVDF	U89 PP	U91 ETFE	S32 SS316L	S40 Tit. Gr.2	S41 Tit. Gr.7	S43 Hast. C-276	<table border="1"> <tr><td>DD DD drive</td></tr> <tr><td>SP SQ parallel</td></tr> <tr><td>SR SQ 45° rot.</td></tr> </table>	DD DD drive	SP SQ parallel	SR SQ 45° rot.	<table border="1"> <tr><td>Vp60 60° V-port</td></tr> <tr><td>Vh vented cylinder</td></tr> <tr><td>B7 B7 body bolts</td></tr> <tr><td>Ti Ti body bolts</td></tr> <tr><td>RAL... special paint</td></tr> </table>	Vp60 60° V-port	Vh vented cylinder	B7 B7 body bolts	Ti Ti body bolts	RAL... special paint
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Note: Actuator options and accessories to be specified on orders separately.