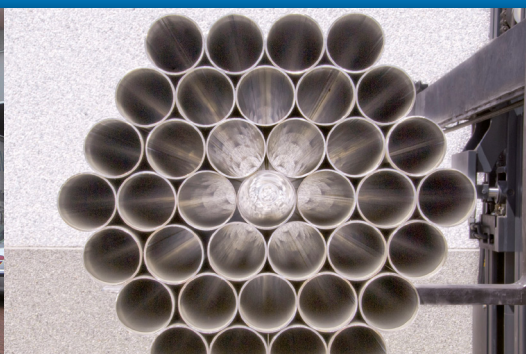
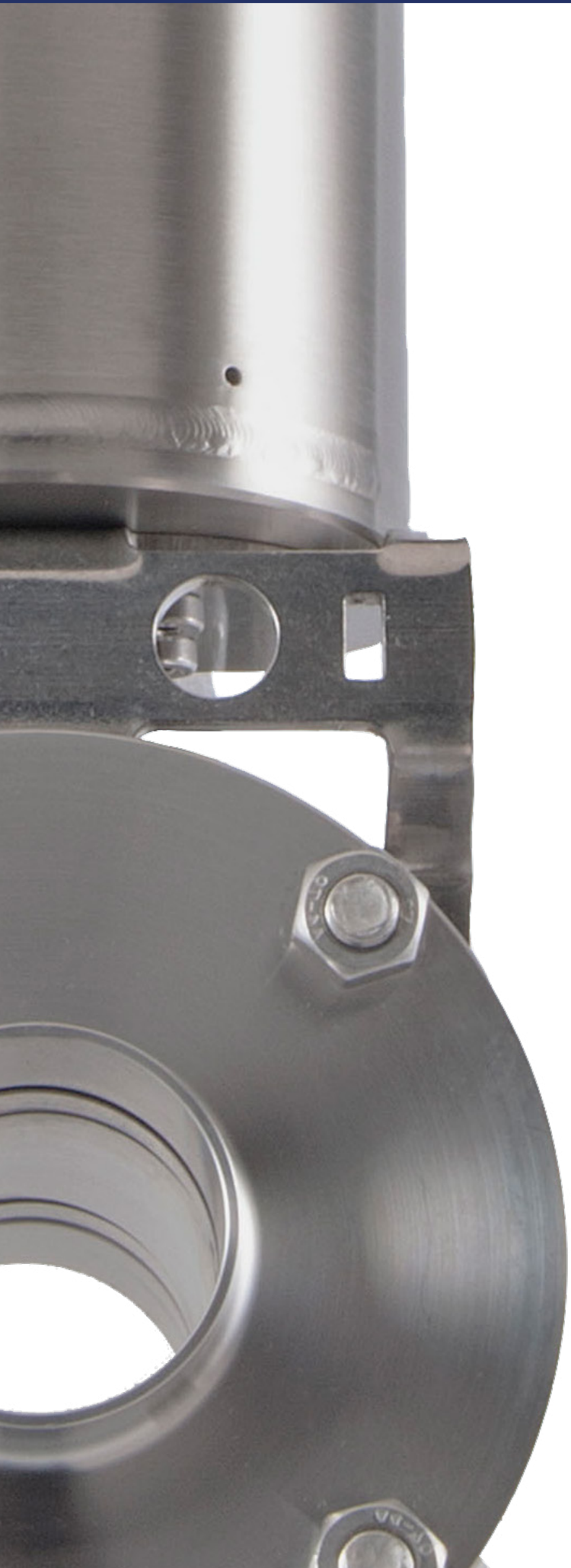


# HYGIENIC TUBE & PROCESS COMPONENTS



## VALVES M&S ARMATUREN





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# VALVES M&S ARMATUREN

In recent years M&S Armaturen has continuously developed her valves program. This has led to a package of valves in various designs and qualities. A lot of attention has been paid to reliability, cleanability, recognizability and applicability. The result is a range of valves that meet to all guidelines and current requirements & standards.

The ingenuity with which the program was developed is demonstrated by the sophisticated composition. This exists from unique solutions in terms of compactness, composition and application possibilities.

The many possibilities in terms of controls, connections and elastomers makes the valves of M&S unique in the market. All the valves are marked with a stainless steel quality, dimensions and batch number. Also the seals are marked and are provided with an FDA approval.

The flexibility of M&S Armaturen makes it possible to produce valves according to customer requirements.



# BUTTERFLY VALVES TYPE SV04

MATERIAL	TYPE SV04
Product contact parts	304(L) or 316L
ID finish	Ra <0,8 µm
Other stainless steel parts	Stainless steel 304 W. St. 14301
Standard seal	EPDM
Maximum working pressure	10 bar
Maximum temperature	Elastomer dependent
Sizes	Weld/weld DN15 - DN150, 1" - 4" and ISO 33,7 - 114,3 Flange/flange DN25 - DN200, 1" - 4" Other connections DN15 - DN150, 1" - 4"
Seal options	EPDM, VMQ (silicone), FKM (Viton) and HNBR.

VERSION	
Connection	Weld, Thread, Liner Nut, Flange and Clamp ferrule DIN11851, DIN11853, DIN11864, DIN32676 EN1092, SMS, IDF, DS, BSP etc. On requirement of the customers draw
Standard operating	Manual operated (2 positions) Divers manual operated options
Pneumatical operating	Double air, air / spring (4 versions) Pams 0 - Stainless steel Pams 1 - Stainless steel Pams 2 - Stainless steel Pams 8 - plastic
Required air pressure	Depends on type of actuator
Options	Actuator with positioner Electrical actuator Control unit Open/close indicator (CE) Kinetrol actuator Adjustable on demand

MAINTENANCE	
Seal	T-profile seal and shaft bushes
Seal between flanges	DIN 11864-A (O-ring)
Revision/dissambly	Between flange model can be disassembled Other models are shut out of revision
Special tools required	No

The SV04 butterfly valve is the most actual generation butterfly valves of M&S Armaturen. These butterfly valves have a construction with guiding bushes at the top and bottom of the valve. The special seal makes it possible to use this valve with full vacuum.

The SV04 butterfly valves are provided with an conform EHEDG approval on the full valve, including the coupling for the connection and possibility of disassembly.

The butterfly valves are available with different hand and air controls. The internal roughness of the valve is always lower than 0.8 µm. Optional the butterfly valves can be equipped with a position indicator or a control head. This means that you are always aware of the valve position.

Unique characteristics of the M&S butterfly valves SV04 are:

- conform EHEDG approve
- Unique manual control without leeway for a larger lifespan
- Compact shape (between flanges)
- Simple and safe construction for confirmation of position
- Compatible with previous versions (Type 95 en 98)
- ID finish < 0.8 µm
- Double-sides (robust) lantern piece for mounting the actuator
- Reliable and powerful air motor in various models
- Available in sizes NW15 - NW200 and 1" - 4"
- Distinctive appearance.



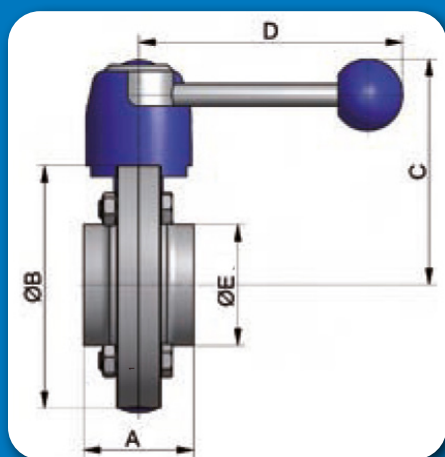
# BUTTERFLY VALVE WELD/WELD

## TYPE SV04

DIN	A	B	C	D	E
DN15	40	87	89	122	19
DN20	40	87	89	122	23
DN25	40	87	89	122	29
DN32	42	92	91	122	35
DN40	50	97	94	122	41
DN50	50	110	100	122	53
DN65	50	127	109	150	70
DN80	60	142	116	150	85
DN100	64	162	127	150	104
DN125	86	202	155	216	129
DN150	90	231	170	216	154

INCH	A	B	C	D	E
1"	40	87	89	122	25.4
1,5"	50	97	94	122	38.1
2"	50	110	100	122	50.8
2,5"	50	127	109	150	63.5
3"	60	142	116	150	76.1
4"	64	162	127	150	101.6

ISO	A	B	C	D	E
33.7	40	87	89	122	33.7
42.4	42	92	91	122	42.4
48.3	50	97	94	122	48.3
60.3	50	110	100	122	60.3
76.1	50	127	109	150	76.1
88.9	60	142	116	150	88.9
114.3	64	162	127	150	114.3



# BUTTERFLY VALVE WELD/WELD

## Without handle

DIN	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
DN15	25133002MS	25136002MS	25143002MS	25146002MS	25153002MS	25156002MS
DN20	25133003MS	25136003MS	25143003MS	25146003MS	25153003MS	25156003MS
DN25	25133005MS	25136005MS	25143005MS	25146005MS	25153005MS	25156005MS
DN32	25133007MS	25136007MS	25143007MS	25146007MS	25153007MS	25156007MS
DN40	25133009MS	25136009MS	25143009MS	25146009MS	25153009MS	25156009MS
DN50	25133011MS	25136011MS	25143011MS	25146011MS	25153011MS	25156011MS
DN65	25133013MS	25136013MS	25143013MS	25146013MS	25153013MS	25156013MS
DN80	25133015MS	25136015MS	25143015MS	25146015MS	25153015MS	25156015MS
DN100	25133017MS	25136017MS	25143017MS	25146017MS	25153017MS	25156017MS
DN125	25133018MS	25136018MS	25143018MS	25146018MS	25153018MS	25156018MS
DN150	25133019MS	25136019MS	25143019MS	25146019MS	25153019MS	25156019MS

## Including handle

DIN	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
DN15	25133202MS	25136202MS	25143202MS	25146202MS	25153202MS	25156202MS
DN20	25133203MS	25136203MS	25143203MS	25146203MS	25153203MS	25156203MS
DN25	25133205MS	25136205MS	25143205MS	25146205MS	25153205MS	25156205MS
DN32	25133207MS	25136207MS	25143207MS	25146207MS	25153207MS	25156207MS
DN40	25133209MS	25136209MS	25143209MS	25146209MS	25153209MS	25156209MS
DN50	25133211MS	25136211MS	25143211MS	25146211MS	25153211MS	25156211MS
DN65	25133213MS	25136213MS	25143213MS	25146213MS	25153213MS	25156213MS
DN80	25133215MS	25136215MS	25143215MS	25146215MS	25153215MS	25156215MS
DN100	25133217MS	25136217MS	25143217MS	25146217MS	25153217MS	25156217MS
DN125	25133218MS	25136218MS	25143218MS	25146218MS	25153218MS	25156218MS
DN150	25133219MS	25136219MS	25143219MS	25146219MS	25153219MS	25156219MS

## Including air control PAMS-1/2 Air open/spring closing

DIN	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
DN15	25133802MS	25136802MS	25143802MS	25146802MS	25153802MS	25156802MS
DN20	25133803MS	25136803MS	25143803MS	25146803MS	25153803MS	25156803MS
DN25	25133805MS	25136805MS	25143805MS	25146805MS	25153805MS	25156805MS
DN32	25133807MS	25136807MS	25143807MS	25146807MS	25153807MS	25156807MS
DN40	25133809MS	25136809MS	25143809MS	25146809MS	25153809MS	25156809MS
DN50	25133811MS	25136811MS	25143811MS	25146811MS	25153811MS	25156811MS
DN65	25133813MS	25136813MS	25143813MS	25146813MS	25153813MS	25156813MS
DN80	25133815MS	25136815MS	25143815MS	25146815MS	25153815MS	25156815MS
DN100	25133817MS	25136817MS	25143817MS	25146817MS	25153817MS	25156817MS
DN125	25133818MS	25136818MS	25143818MS	25146818MS	25153818MS	25156818MS
DN150	25133819MS	25136819MS	25143819MS	25146819MS	25153819MS	25156819MS

# BUTTERFLY VALVE WELD/WELD

## Including air control PAMS-0 Air open/spring closing

DIN	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
DN15	25133402MS	25136402MS	25143402MS	25146402MS	25153402MS	25156402MS
DN20	25133403MS	25136403MS	25143403MS	25146403MS	25153403MS	25156403MS
DN25	25133405MS	25136405MS	25143405MS	25146405MS	25153405MS	25156405MS
DN32	25133407MS	25136407MS	25143407MS	25146407MS	25153407MS	25156407MS
DN40	25133409MS	25136409MS	25143409MS	25146409MS	25153409MS	25156409MS
DN50	25133411MS	25136411MS	25143411MS	25146411MS	25153411MS	25156411MS

## Including air control PAMS-8 Air open/spring closing

DIN	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
DN15	25133502MS	25136502MS	25143502MS	25146502MS	25153502MS	25156502MS
DN20	25133503MS	25136503MS	25143503MS	25146503MS	25153503MS	25156503MS
DN25	25133505MS	25136505MS	25143505MS	25146505MS	25153505MS	25156505MS
DN32	25133507MS	25136507MS	25143507MS	25146507MS	25153507MS	25156507MS
DN40	25133509MS	25136509MS	25143509MS	25146509MS	25153509MS	25156509MS
DN50	25133511MS	25136511MS	25143511MS	25146511MS	25153511MS	25156511MS
DN65	25133513MS	25136513MS	25143513MS	25146513MS	25153513MS	25156513MS
DN80	25133515MS	25136515MS	25143515MS	25146515MS	25153515MS	25156515MS
DN100	25133517MS	25136517MS	25143517MS	25146517MS	25153517MS	25156517MS

## Including air control PAMS-1/2 Air open/air closing

DIN	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
DN15	25133702MS	25136702MS	25143702MS	25146702MS	25153702MS	25156702MS
DN20	25133703MS	25136703MS	25143703MS	25146703MS	25153703MS	25156703MS
DN25	25133705MS	25136705MS	25143705MS	25146705MS	25153705MS	25156705MS
DN32	25133707MS	25136707MS	25143707MS	25146707MS	25153707MS	25156707MS
DN40	25133709MS	25136709MS	25143709MS	25146709MS	25153709MS	25156709MS
DN50	25133711MS	25136711MS	25143711MS	25146711MS	25153711MS	25156711MS
DN65	25133713MS	25136713MS	25143713MS	25146713MS	25153713MS	25156713MS
DN80	25133715MS	25136715MS	25143715MS	25146715MS	25153715MS	25156715MS
DN100	25133717MS	25136717MS	25143717MS	25146717MS	25153717MS	25156717MS
DN125	25133718MS	25136718MS	25143718MS	25146718MS	25153718MS	25156718MS
DN150	25133719MS	25136719MS	25143719MS	25146719MS	25153719MS	25156719MS

## Without handle

INCH	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
1"	25133004MS	25136004MS	25143004MS	25146004MS	25153004MS	25156004MS
1,5"	25133008MS	25136008MS	25143008MS	25146008MS	25153008MS	25156008MS
2"	25133010MS	25136010MS	25143010MS	25146010MS	25153010MS	25156010MS
2,5"	25133012MS	25136012MS	25143012MS	25146012MS	25153012MS	25156012MS
3"	25133014MS	25136014MS	25143014MS	25146014MS	25153014MS	25156014MS
4"	25133016MS	25136016MS	25143016MS	25146016MS	25153016MS	25156016MS



# BUTTERFLY VALVE WELD/WELD

## Including handle

INCH	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
1"	25133204MS	25136204MS	25143204MS	25146204MS	25153204MS	25156204MS
1,5"	25133208MS	25136208MS	25143208MS	25146208MS	25153208MS	25156208MS
2"	25133210MS	25136210MS	25143210MS	25146210MS	25153210MS	25156210MS
2,5"	25133212MS	25136212MS	25143212MS	25146212MS	25153212MS	25156212MS
3"	25133214MS	25136214MS	25143214MS	25146214MS	25153214MS	25156214MS
4"	25133216MS	25136216MS	25143216MS	25146216MS	25153216MS	25156216MS

## Including air control PAMS-1/2 Air open/spring closing

INCH	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
1"	25133804MS	25136804MS	25143804MS	25146804MS	25153804MS	25156804MS
1,5"	25133808MS	25136808MS	25143808MS	25146808MS	25153808MS	25156808MS
2"	25133810MS	25136810MS	25143810MS	25146810MS	25153810MS	25156810MS
2,5"	25133812MS	25136812MS	25143812MS	25146812MS	25153812MS	25156812MS
3"	25133814MS	25136814MS	25143814MS	25146814MS	25153814MS	25156814MS
4"	25133816MS	25136816MS	25143816MS	25146816MS	25153816MS	25156816MS

## Including air control PAMS-0 Air open/spring closing

INCH	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
1"	25133404MS	25136404MS	25143404MS	25146404MS	25153404MS	25156404MS
1,5"	25133408MS	25136408MS	25143408MS	25146408MS	25153408MS	25156408MS
2"	25133410MS	25136410MS	25143410MS	25146410MS	25153410MS	25156410MS

## Including air control PAMS-8 Air open/spring closing

INCH	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
1"	25133504MS	25136504MS	25143504MS	25146504MS	25153504MS	25156504MS
1,5"	25133508MS	25136508MS	25143508MS	25146508MS	25153508MS	25156508MS
2"	25133510MS	25136510MS	25143510MS	25146510MS	25153510MS	25156510MS
2,5"	25133512MS	25136512MS	25143512MS	25146512MS	25153512MS	25156512MS
3"	25133514MS	25136514MS	25143514MS	25146514MS	25153514MS	25156514MS
4"	25133516MS	25136516MS	25143516MS	25146516MS	25153516MS	25156516MS

## Including air control PAMS-1/2 Air open/air closing

INCH	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
1"	25133704MS	25136704MS	25143704MS	25146704MS	25153704MS	25156704MS
1,5"	25133708MS	25136708MS	25143708MS	25146708MS	25153708MS	25156708MS
2"	25133710MS	25136710MS	25143710MS	25146710MS	25153710MS	25156710MS
2,5"	25133712MS	25136712MS	25143712MS	25146712MS	25153712MS	25156712MS
3"	25133714MS	25136714MS	25143714MS	25146714MS	25153714MS	25156714MS
4"	25133716MS	25136716MS	25143716MS	25146716MS	25153716MS	25156716MS

# BUTTERFLY VALVE WELD/WELD

## Without handle

ISO	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
33,7	25133055MS	25136055MS	25143055MS	25146055MS	25153055MS	25156055MS
42,4	25133057MS	25136057MS	25143057MS	25146057MS	25153057MS	25156057MS
48,3	25133059MS	25136059MS	25143059MS	25146059MS	25153059MS	25156059MS
60,3	25133061MS	25136061MS	25143061MS	25146061MS	25153061MS	25156061MS
76,1	25133063MS	25136063MS	25143063MS	25146063MS	25153063MS	25156063MS
88,9	25133065MS	25136065MS	25143065MS	25146065MS	25153065MS	25156065MS
114,3	25133066MS	25136066MS	25143066MS	25146066MS	25153066MS	25156066MS

## Including handle

ISO	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
33,7	25133255MS	25136255MS	25143255MS	25146255MS	25153255MS	25156255MS
42,4	25133257MS	25136257MS	25143257MS	25146257MS	25153257MS	25156257MS
48,3	25133259MS	25136259MS	25143259MS	25146259MS	25153259MS	25156259MS
60,3	25133261MS	25136261MS	25143261MS	25146261MS	25153261MS	25156261MS
76,1	25133263MS	25136263MS	25143263MS	25146263MS	25153263MS	25156263MS
88,9	25133265MS	25136265MS	25143265MS	25146265MS	25153265MS	25156265MS
114,3	25133266MS	25136266MS	25143266MS	25146266MS	25153266MS	25156266MS

## Including air control PAMS-1/2 Air open/spring closing

ISO	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
33,7	25133855MS	25136855MS	25143855MS	25146855MS	25153855MS	25156855MS
42,4	25133857MS	25136857MS	25143857MS	25146857MS	25153857MS	25156857MS
48,3	25133859MS	25136859MS	25143859MS	25146859MS	25153859MS	25156859MS
60,3	25133861MS	25136861MS	25143861MS	25146861MS	25153861MS	25156861MS
76,1	25133863MS	25136863MS	25143863MS	25146863MS	25153863MS	25156863MS
88,9	25133865MS	25136865MS	25143865MS	25146865MS	25153865MS	25156865MS
114,3	25133866MS	25136866MS	25143866MS	25146866MS	25153866MS	25156866MS

## Including air control PAMS-0 Air open/spring closing

ISO	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
33,7	25133455MS	25136455MS	25143455MS	25146455MS	25153455MS	25156455MS
42,4	25133457MS	25136457MS	25143457MS	25146457MS	25153457MS	25156457MS
48,3	25133459MS	25136459MS	25143459MS	25146459MS	25153459MS	25156459MS

# BUTTERFLY VALVE WELD/WELD

## Including air control PAMS-8 Air open/spring closing

ISO	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
33,7	25133555MS	25136555MS	25143555MS	25146555MS	25153555MS	25156555MS
42,4	25133557MS	25136557MS	25143557MS	25146557MS	25153557MS	25156557MS
48,3	25133559MS	25136559MS	25143559MS	25146559MS	25153559MS	25156559MS
60,3	25133561MS	25136561MS	25143561MS	25146561MS	25153561MS	25156561MS
76,1	25133563MS	25136563MS	25143563MS	25146563MS	25153563MS	25156563MS
88,9	25133565MS	25136565MS	25143565MS	25146565MS	25153565MS	25156565MS
114,3	25133566MS	25136566MS	25143566MS	25146566MS	25153566MS	25156566MS

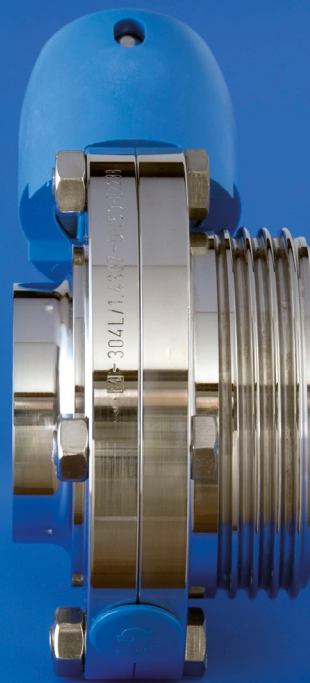
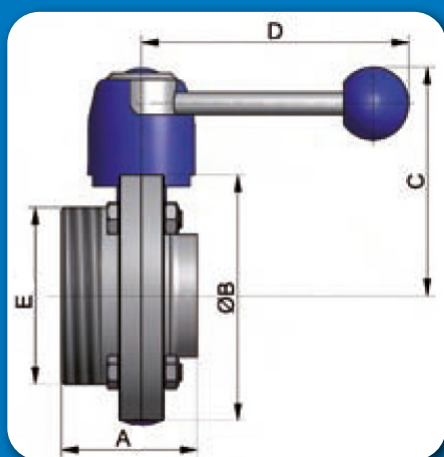
## Including air control PAMS-1/2 Air open/air closing

ISO	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
33,7	25133755MS	25136755MS	25143755MS	25146755MS	25153755MS	25156755MS
42,4	25133757MS	25136757MS	25143757MS	25146757MS	25153757MS	25156757MS
48,3	25133759MS	25136759MS	25143759MS	25146759MS	25153759MS	25156759MS
60,3	25133761MS	25136761MS	25143761MS	25146761MS	25153761MS	25156761MS
76,1	25133763MS	25136763MS	25143763MS	25146763MS	25153763MS	25156763MS
88,9	25133765MS	25136765MS	25143765MS	25146765MS	25153765MS	25156765MS
114,3	25133766MS	25136766MS	25143766MS	25146766MS	25153766MS	25156766MS

# BUTTERFLY VALVE WELD/MALE PART

DIN	A	B	C	D	E
DN15	52	87	89	122	Rd34x1/8
DN20	52	87	89	122	Rd44x1/8
DN25	52	87	89	122	Rd52x1/8
DN32	53	92	91	122	Rd58x1/8
DN40	61	97	94	122	Rd65x1/8
DN50	61	110	100	122	Rd78x1/8
DN65	63	127	109	150	Rd95x1/8
DN80	74	142	116	150	Rd110x1/8
DN100	78	162	127	150	Rd130x1/8
DN125	99	202	155	216	Rd160x1/8
DN150	107	231	170	216	Rd190x1/8

INCH	A	B	C	D	E
1" (25,4)	52	87	89	122	Rd52x1/8
1,5" (38,1)	61	97	94	122	Rd65x1/8
2" (50,8)	61	110	100	122	Rd78x1/8
2,5" (63,5)	63	127	109	150	Rd95x1/8
3" (76,1)	69	142	116	150	Rd104x1/8
4" (101,6)	78	162	127	150	Rd130x1/8



# BUTTERFLY VALVE WELD/MALE PART

## Without handle

DIN	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
DN15	25233002MS	25236002MS	25243002MS	25246002MS	25253002MS	25256002MS
DN20	25233003MS	25236003MS	25243003MS	25246003MS	25253003MS	25256003MS
DN25	25233005MS	25236005MS	25243005MS	25246005MS	25253005MS	25256005MS
DN32	25233007MS	25236007MS	25243007MS	25246007MS	25253007MS	25256007MS
DN40	25233009MS	25236009MS	25243009MS	25246009MS	25253009MS	25256009MS
DN50	25233011MS	25236011MS	25243011MS	25246011MS	25253011MS	25256011MS
DN65	25233013MS	25236013MS	25243013MS	25246013MS	25253013MS	25256013MS
DN80	25233015MS	25236015MS	25243015MS	25246015MS	25253015MS	25256015MS
DN100	25233017MS	25236017MS	25243017MS	25246017MS	25253017MS	25256017MS
DN125	25233018MS	25236018MS	25243018MS	25246018MS	25253018MS	25256018MS
DN150	25233019MS	25236019MS	25243019MS	25246019MS	25253019MS	25256019MS

## Including handle

DIN	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
DN15	25233202MS	25236202MS	25243202MS	25246202MS	25253202MS	25256202MS
DN20	25233203MS	25236203MS	25243203MS	25246203MS	25253203MS	25256203MS
DN25	25233205MS	25236205MS	25243205MS	25246205MS	25253205MS	25256205MS
DN32	25233207MS	25236207MS	25243207MS	25246207MS	25253207MS	25256207MS
DN40	25233209MS	25236209MS	25243209MS	25246209MS	25253209MS	25256209MS
DN50	25233211MS	25236211MS	25243211MS	25246211MS	25253211MS	25256211MS
DN65	25233213MS	25236213MS	25243213MS	25246213MS	25253213MS	25256213MS
DN80	25233215MS	25236215MS	25243215MS	25246215MS	25253215MS	25256215MS
DN100	25233217MS	25236217MS	25243217MS	25246217MS	25253217MS	25256217MS
DN125	25233218MS	25236218MS	25243218MS	25246218MS	25253218MS	25256218MS
DN150	25233219MS	25236219MS	25243219MS	25246219MS	25253219MS	25256219MS

## Including air control PAMS-1/2 Air open/spring closing

DIN	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
DN15	25233802MS	25236802MS	25243802MS	25246802MS	25253802MS	25256802MS
DN20	25233803MS	25236803MS	25243803MS	25246803MS	25253803MS	25256803MS
DN25	25233805MS	25236805MS	25243805MS	25246805MS	25253805MS	25256805MS
DN32	25233807MS	25236807MS	25243807MS	25246807MS	25253807MS	25256807MS
DN40	25233809MS	25236809MS	25243809MS	25246809MS	25253809MS	25256809MS
DN50	25233811MS	25236811MS	25243811MS	25246811MS	25253811MS	25256811MS
DN65	25233813MS	25236813MS	25243813MS	25246813MS	25253813MS	25256813MS
DN80	25233815MS	25236815MS	25243815MS	25246815MS	25253815MS	25256815MS
DN100	25233817MS	25236817MS	25243817MS	25246817MS	25253817MS	25256817MS
DN125	25233818MS	25236818MS	25243818MS	25246818MS	25253818MS	25256818MS
DN150	25233819MS	25236819MS	25243819MS	25246819MS	25253819MS	25256819MS

# BUTTERFLY VALVE WELD/MALE PART

## Including air control PAMS-0 Air open/spring closing

DIN	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
DN15	25233402MS	25236402MS	25243402MS	25246402MS	25253402MS	25256402MS
DN20	25233403MS	25236403MS	25243403MS	25246403MS	25253403MS	25256403MS
DN25	25233405MS	25236405MS	25243405MS	25246405MS	25253405MS	25256405MS
DN32	25233407MS	25236407MS	25243407MS	25246407MS	25253407MS	25256407MS
DN40	25233409MS	25236409MS	25243409MS	25246409MS	25253409MS	25256409MS
DN50	25233411MS	25236411MS	25243411MS	25246411MS	25253411MS	25256411MS

## Including air control PAMS-8 Air open/spring closing

DIN	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
DN15	25233502MS	25236502MS	25243502MS	25246502MS	25253502MS	25256502MS
DN20	25233503MS	25236503MS	25243503MS	25246503MS	25253503MS	25256503MS
DN25	25233505MS	25236505MS	25243505MS	25246505MS	25253505MS	25256505MS
DN32	25233507MS	25236507MS	25243507MS	25246507MS	25253507MS	25256507MS
DN40	25233509MS	25236509MS	25243509MS	25246509MS	25253509MS	25256509MS
DN50	25233511MS	25236511MS	25243511MS	25246511MS	25253511MS	25256511MS
DN65	25233513MS	25236513MS	25243513MS	25246513MS	25253513MS	25256513MS
DN80	25233515MS	25236515MS	25243515MS	25246515MS	25253515MS	25256515MS
DN100	25233517MS	25236517MS	25243517MS	25246517MS	25253517MS	25256517MS

## Including air control PAMS-1/2 Air open/air closing

DIN	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
DN15	25233702MS	25236702MS	25243702MS	25246702MS	25253702MS	25256702MS
DN20	25233703MS	25236703MS	25243703MS	25246703MS	25253703MS	25256703MS
DN25	25233705MS	25236705MS	25243705MS	25246705MS	25253705MS	25256705MS
DN32	25233707MS	25236707MS	25243707MS	25246707MS	25253707MS	25256707MS
DN40	25233709MS	25236709MS	25243709MS	25246709MS	25253709MS	25256709MS
DN50	25233711MS	25236711MS	25243711MS	25246711MS	25253711MS	25256711MS
DN65	25233713MS	25236713MS	25243713MS	25246713MS	25253713MS	25256713MS
DN80	25233715MS	25236715MS	25243715MS	25246715MS	25253715MS	25256715MS
DN100	25233717MS	25236717MS	25243717MS	25246717MS	25253717MS	25256717MS
DN125	25233718MS	25236718MS	25243718MS	25246718MS	25253718MS	25256718MS
DN150	25233719MS	25236719MS	25243719MS	25246719MS	25253719MS	25256719MS

## Without handle

INCH	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
1"	25233004MS	25236004MS	25243004MS	25246004MS	25253004MS	25256004MS
1,5"	25233008MS	25236008MS	25243008MS	25246008MS	25253008MS	25256008MS
2"	25233010MS	25236010MS	25243010MS	25246010MS	25253010MS	25256010MS
2,5"	25233012MS	25236012MS	25243012MS	25246012MS	25253012MS	25256012MS
3"	25233014MS	25236014MS	25243014MS	25246014MS	25253014MS	25256014MS
4"	25233016MS	25236016MS	25243016MS	25246016MS	25253016MS	25256016MS

# BUTTERFLY VALVE WELD/MALE PART

## Including handle

INCH	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
1"	25233204MS	25236204MS	25243204MS	25246204MS	25253204MS	25256204MS
1,5"	25233208MS	25236208MS	25243208MS	25246208MS	25253208MS	25256208MS
2"	25233210MS	25236210MS	25243210MS	25246210MS	25253210MS	25256210MS
2,5"	25233212MS	25236212MS	25243212MS	25246212MS	25253212MS	25256212MS
3"	25233214MS	25236214MS	25243214MS	25246214MS	25253214MS	25256214MS
4"	25233216MS	25236216MS	25243216MS	25246216MS	25253216MS	25256216MS

## Including air control PAMS-1/2 Air open/spring closing

INCH	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
1"	25233804MS	25236804MS	25243804MS	25246804MS	25253804MS	25256804MS
1,5"	25233808MS	25236808MS	25243808MS	25246808MS	25253808MS	25256808MS
2"	25233810MS	25236810MS	25243810MS	25246810MS	25253810MS	25256810MS
2,5"	25233812MS	25236812MS	25243812MS	25246812MS	25253812MS	25256812MS
3"	25233814MS	25236814MS	25243814MS	25246814MS	25253814MS	25256814MS
4"	25233816MS	25236816MS	25243816MS	25246816MS	25253816MS	25256816MS

## Including air control PAMS-0 Air open/spring closing

INCH	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
1"	25233404MS	25236404MS	25243404MS	25246404MS	25253404MS	25256404MS
1,5"	25233408MS	25236408MS	25243408MS	25246408MS	25253408MS	25256408MS
2"	25233410MS	25236410MS	25243410MS	25246410MS	25253410MS	25256410MS

## Including air control PAMS-8 Air open/spring closing

INCH	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
1"	25233504MS	25236504MS	25243504MS	25246504MS	25253504MS	25256504MS
1,5"	25233508MS	25236508MS	25243508MS	25246508MS	25253508MS	25256508MS
2"	25233510MS	25236510MS	25243510MS	25246510MS	25253510MS	25256510MS
2,5"	25233512MS	25236512MS	25243512MS	25246512MS	25253512MS	25256512MS
3"	25233514MS	25236514MS	25243514MS	25246514MS	25253514MS	25256514MS
4"	25233516MS	25236516MS	25243516MS	25246516MS	25253516MS	25256516MS

## Including air control PAMS-1/2 Air open/air closing

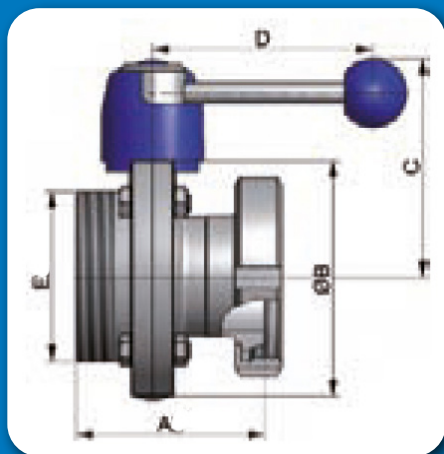
INCH	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
1"	25233704MS	25236704MS	25243704MS	25246704MS	25253704MS	25256704MS
1,5"	25233708MS	25236708MS	25243708MS	25246708MS	25253708MS	25256708MS
2"	25233710MS	25236710MS	25243710MS	25246710MS	25253710MS	25256710MS
2,5"	25233712MS	25236712MS	25243712MS	25246712MS	25253712MS	25256712MS
3"	25233714MS	25236714MS	25243714MS	25246714MS	25253714MS	25256714MS
4"	25233716MS	25236716MS	25243716MS	25246716MS	25253716MS	25256716MS

# BUTTERFLY VALVE MALE/LINER NUT

## TYPE SV04

DIN	A	B	C	D	E
DN15	69	87	89	122	Rd34x1/8
DN20	70	87	89	122	Rd44x1/8
DN25	74	87	89	122	Rd52x1/8
DN32	78	92	91	122	Rd58x1/8
DN40	87	97	94	122	Rd65x1/8
DN50	89	110	100	122	Rd78x1/8
DN65	95	127	109	150	Rd95x1/8
DN80	111	142	116	150	Rd110x1/8
DN100	122	162	127	150	Rd130x1/8
DN125	133	202	155	216	Rd160x1/8
DN150	144	231	170	216	Rd190x1/8

INCH	A	B	C	D	E
1" (25,4)	74	87	89	122	Rd52x1/8
1,5" (38,1)	87	97	94	122	Rd65x1/8
2" (50,8)	89	110	100	122	Rd78x1/8
2,5" (63,5)	95	127	109	150	Rd95x1/8
3" (76,1)	101	142	116	150	Rd104x1/8
4" (101,6)	122	162	127	150	Rd130x1/8





# BUTTERFLY VALVE MALE/LINER NUT

## Without handle

DIN	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
DN15	25333002MS	25336002MS	25343002MS	25346002MS	25353002MS	25356002MS
DN20	25333003MS	25336003MS	25343003MS	25346003MS	25353003MS	25356003MS
DN25	25333005MS	25336005MS	25343005MS	25346005MS	25353005MS	25356005MS
DN32	25333007MS	25336007MS	25343007MS	25346007MS	25353007MS	25356007MS
DN40	25333009MS	25336009MS	25343009MS	25346009MS	25353009MS	25356009MS
DN50	25333011MS	25336011MS	25343011MS	25346011MS	25353011MS	25356011MS
DN65	25333013MS	25336013MS	25343013MS	25346013MS	25353013MS	25356013MS
DN80	25333015MS	25336015MS	25343015MS	25346015MS	25353015MS	25356015MS
DN100	25333017MS	25336017MS	25343017MS	25346017MS	25353017MS	25356017MS
DN125	25333018MS	25336018MS	25343018MS	25346018MS	25353018MS	25356018MS
DN150	25333019MS	25336019MS	25343019MS	25346019MS	25353019MS	25356019MS

## Including handle

DIN	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
DN15	25333202MS	25336202MS	25343202MS	25346202MS	25353202MS	25356202MS
DN20	25333203MS	25336203MS	25343203MS	25346203MS	25353203MS	25356203MS
DN25	25333205MS	25336205MS	25343205MS	25346205MS	25353205MS	25356205MS
DN32	25333207MS	25336207MS	25343207MS	25346207MS	25353207MS	25356207MS
DN40	25333209MS	25336209MS	25343209MS	25346209MS	25353209MS	25356209MS
DN50	25333211MS	25336211MS	25343211MS	25346211MS	25353211MS	25356211MS
DN65	25333213MS	25336213MS	25343213MS	25346213MS	25353213MS	25356213MS
DN80	25333215MS	25336215MS	25343215MS	25346215MS	25353215MS	25356215MS
DN100	25333217MS	25336217MS	25343217MS	25346217MS	25353217MS	25356217MS
DN125	25333218MS	25336218MS	25343218MS	25346218MS	25353218MS	25356218MS
DN150	25333219MS	25336219MS	25343219MS	25346219MS	25353219MS	25356219MS

## Including air control PAMS-1/2 Air open/spring closing

DIN	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
DN15	25333802MS	25336802MS	25343802MS	25346802MS	25353802MS	25356802MS
DN20	25333803MS	25336803MS	25343803MS	25346803MS	25353803MS	25356803MS
DN25	25333805MS	25336805MS	25343805MS	25346805MS	25353805MS	25356805MS
DN32	25333807MS	25336807MS	25343807MS	25346807MS	25353807MS	25356807MS
DN40	25333809MS	25336809MS	25343809MS	25346809MS	25353809MS	25356809MS
DN50	25333811MS	25336811MS	25343811MS	25346811MS	25353811MS	25356811MS
DN65	25333813MS	25336813MS	25343813MS	25346813MS	25353813MS	25356813MS
DN80	25333815MS	25336815MS	25343815MS	25346815MS	25353815MS	25356815MS
DN100	25333817MS	25336817MS	25343817MS	25346817MS	25353817MS	25356817MS
DN125	25333818MS	25336818MS	25343818MS	25346818MS	25353818MS	25356818MS
DN150	25333819MS	25336819MS	25343819MS	25346819MS	25353819MS	25356819MS

# BUTTERFLY VALVE MALE/LINER NUT

## Including air control PAMS-0 Air open/spring closing

DIN	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
DN15	25333402MS	25336402MS	25343402MS	25346402MS	25353402MS	25356402MS
DN20	25333403MS	25336403MS	25343403MS	25346403MS	25353403MS	25356403MS
DN25	25333405MS	25336405MS	25343405MS	25346405MS	25353405MS	25356405MS
DN32	25333407MS	25336407MS	25343407MS	25346407MS	25353407MS	25356407MS
DN40	25333409MS	25336409MS	25343409MS	25346409MS	25353409MS	25356409MS
DN50	25333411MS	25336411MS	25343411MS	25346411MS	25353411MS	25356411MS

## Including air control PAMS-8 Air open/spring closing

DIN	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
DN15	25333502MS	25336502MS	25343502MS	25346502MS	25353502MS	25356502MS
DN20	25333503MS	25336503MS	25343503MS	25346503MS	25353503MS	25356503MS
DN25	25333505MS	25336505MS	25343505MS	25346505MS	25353505MS	25356505MS
DN32	25333507MS	25336507MS	25343507MS	25346507MS	25353507MS	25356507MS
DN40	25333509MS	25336509MS	25343509MS	25346509MS	25353509MS	25356509MS
DN50	25333511MS	25336511MS	25343511MS	25346511MS	25353511MS	25356511MS
DN65	25333513MS	25336513MS	25343513MS	25346513MS	25353513MS	25356513MS
DN80	25333515MS	25336515MS	25343515MS	25346515MS	25353515MS	25356515MS
DN100	25333517MS	25336517MS	25343517MS	25346517MS	25353517MS	25356517MS

## Including air control PAMS-1/2 Air open/air closing

DIN	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
DN15	25333702MS	25336702MS	25343702MS	25346702MS	25353702MS	25356702MS
DN20	25333703MS	25336703MS	25343703MS	25346703MS	25353703MS	25356703MS
DN25	25333705MS	25336705MS	25343705MS	25346705MS	25353705MS	25356705MS
DN32	25333707MS	25336707MS	25343707MS	25346707MS	25353707MS	25356707MS
DN40	25333709MS	25336709MS	25343709MS	25346709MS	25353709MS	25356709MS
DN50	25333711MS	25336711MS	25343711MS	25346711MS	25353711MS	25356711MS
DN65	25333713MS	25336713MS	25343713MS	25346713MS	25353713MS	25356713MS
DN80	25333715MS	25336715MS	25343715MS	25346715MS	25353715MS	25356715MS
DN100	25333717MS	25336717MS	25343717MS	25346717MS	25353717MS	25356717MS
DN125	25333718MS	25336718MS	25343718MS	25346718MS	25353718MS	25356718MS
DN150	25333719MS	25336719MS	25343719MS	25346719MS	25353719MS	25356719MS

## Without handle

INCH	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
1"	25333004MS	25336004MS	25343004MS	25346004MS	25353004MS	25356004MS
1,5"	25333008MS	25336008MS	25343008MS	25346008MS	25353008MS	25356008MS
2"	25333010MS	25336010MS	25343010MS	25346010MS	25353010MS	25356010MS
2,5"	25333012MS	25336012MS	25343012MS	25346012MS	25353012MS	25356012MS
3"	25333014MS	25336014MS	25343014MS	25346014MS	25353014MS	25356014MS
4"	25333016MS	25336016MS	25343016MS	25346016MS	25353016MS	25356016MS

# BUTTERFLY VALVE MALE/LINER NUT

## Including handle

INCH	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
1"	25333204MS	25336204MS	25343204MS	25346204MS	25353204MS	25356204MS
1,5"	25333208MS	25336208MS	25343208MS	25346208MS	25353208MS	25356208MS
2"	25333210MS	25336210MS	25343210MS	25346210MS	25353210MS	25356210MS
2,5"	25333212MS	25336212MS	25343212MS	25346212MS	25353212MS	25356212MS
3"	25333214MS	25336214MS	25343214MS	25346214MS	25353214MS	25356214MS
4"	25333216MS	25336216MS	25343216MS	25346216MS	25353216MS	25356216MS

## Including air control PAMS-1/2 Air open/spring closing

INCH	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
1"	25333804MS	25336804MS	25343804MS	25346804MS	25353804MS	25356804MS
1,5"	25333808MS	25336808MS	25343808MS	25346808MS	25353808MS	25356808MS
2"	25333810MS	25336810MS	25343810MS	25346810MS	25353810MS	25356810MS
2,5"	25333812MS	25336812MS	25343812MS	25346812MS	25353812MS	25356812MS
3"	25333814MS	25336814MS	25343814MS	25346814MS	25353814MS	25356814MS
4"	25333816MS	25336816MS	25343816MS	25346816MS	25353816MS	25356816MS

## Including air control PAMS-0 Air open/spring closing

INCH	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
1"	25333404MS	25336404MS	25343404MS	25346404MS	25353404MS	25356404MS
1,5"	25333408MS	25336408MS	25343408MS	25346408MS	25353408MS	25356408MS
2"	25333410MS	25336410MS	25343410MS	25346410MS	25353410MS	25356410MS

## Including air control PAMS-8 Air open/spring closing

INCH	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
1"	25333504MS	25336504MS	25343504MS	25346504MS	25353504MS	25356504MS
1,5"	25333508MS	25336508MS	25343508MS	25346508MS	25353508MS	25356508MS
2"	25333510MS	25336510MS	25343510MS	25346510MS	25353510MS	25356510MS
2,5"	25333512MS	25336512MS	25343512MS	25346512MS	25353512MS	25356512MS
3"	25333514MS	25336514MS	25343514MS	25346514MS	25353514MS	25356514MS
4"	25333516MS	25336516MS	25343516MS	25346516MS	25353516MS	25356516MS

## Including air control PAMS-1/2 Air open/air closing

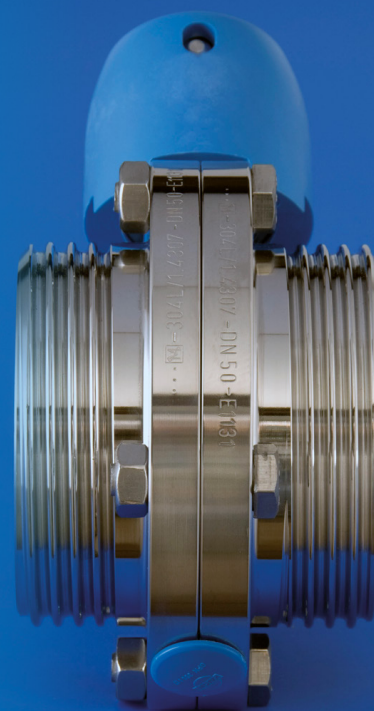
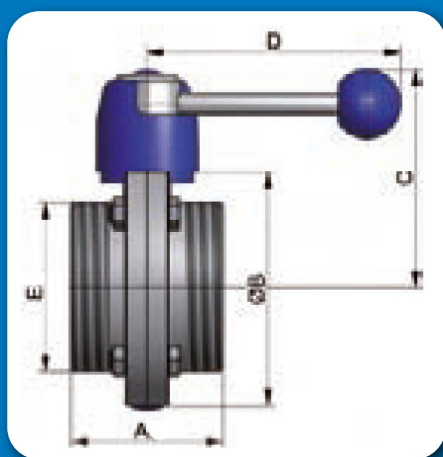
INCH	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
1"	25333704MS	25336704MS	25343704MS	25346704MS	25353704MS	25356704MS
1,5"	25333708MS	25336708MS	25343708MS	25346708MS	25353708MS	25356708MS
2"	25333710MS	25336710MS	25343710MS	25346710MS	25353710MS	25356710MS
2,5"	25333712MS	25336712MS	25343712MS	25346712MS	25353712MS	25356712MS
3"	25333714MS	25336714MS	25343714MS	25346714MS	25353714MS	25356714MS
4"	25333716MS	25336716MS	25343716MS	25346716MS	25353716MS	25356716MS

# BUTTERFLY VALVE MALE/MALE

## TYPE SV04

DIN	A	B	C	D	E
DN15	64	87	89	122	Rd34x1/8
DN20	64	87	89	122	Rd44x1/8
DN25	64	87	89	122	Rd52x1/8
DN32	64	92	91	122	Rd58x1/8
DN40	72	97	94	122	Rd65x1/8
DN50	72	110	100	122	Rd78x1/8
DN65	76	127	109	150	Rd95x1/8
DN80	88	142	116	150	Rd110x1/8
DN100	92	162	127	150	Rd130x1/8
DN125	112	202	155	216	Rd160x1/8
DN150	124	231	170	216	Rd190x1/8

INCH	A	B	C	D	E
1" (25,4)	64	87	89	122	Rd52x1/8
1,5" (38,1)	72	97	94	122	Rd65x1/8
2" (50,8)	72	110	100	122	Rd78x1/8
2,5" (63,5)	76	127	109	150	Rd95x1/8
3" (76,1)	78	142	116	150	Rd104x1/8
4" (101,6)	92	162	127	150	Rd130x1/8



# BUTTERFLY VALVE MALE/MALE

## Without handle

DIN	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
DN15	25433002MS	25436002MS	25443002MS	25446002MS	25453002MS	25456002MS
DN20	25433003MS	25436003MS	25443003MS	25446003MS	25453003MS	25456003MS
DN25	25433005MS	25436005MS	25443005MS	25446005MS	25453005MS	25456005MS
DN32	25433007MS	25436007MS	25443007MS	25446007MS	25453007MS	25456007MS
DN40	25433009MS	25436009MS	25443009MS	25446009MS	25453009MS	25456009MS
DN50	25433011MS	25436011MS	25443011MS	25446011MS	25453011MS	25456011MS
DN65	25433013MS	25436013MS	25443013MS	25446013MS	25453013MS	25456013MS
DN80	25433015MS	25436015MS	25443015MS	25446015MS	25453015MS	25456015MS
DN100	25433017MS	25436017MS	25443017MS	25446017MS	25453017MS	25456017MS
DN125	25433018MS	25436018MS	25443018MS	25446018MS	25453018MS	25456018MS
DN150	25433019MS	25436019MS	25443019MS	25446019MS	25453019MS	25456019MS

## Including handle

DIN	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
DN15	25433202MS	25436202MS	25443202MS	25446202MS	25453202MS	25456202MS
DN20	25433203MS	25436203MS	25443203MS	25446203MS	25453203MS	25456203MS
DN25	25433205MS	25436205MS	25443205MS	25446205MS	25453205MS	25456205MS
DN32	25433207MS	25436207MS	25443207MS	25446207MS	25453207MS	25456207MS
DN40	25433209MS	25436209MS	25443209MS	25446209MS	25453209MS	25456209MS
DN50	25433211MS	25436211MS	25443211MS	25446211MS	25453211MS	25456211MS
DN65	25433213MS	25436213MS	25443213MS	25446213MS	25453213MS	25456213MS
DN80	25433215MS	25436215MS	25443215MS	25446215MS	25453215MS	25456215MS
DN100	25433217MS	25436217MS	25443217MS	25446217MS	25453217MS	25456217MS
DN125	25433218MS	25436218MS	25443218MS	25446218MS	25453218MS	25456218MS
DN150	25433219MS	25436219MS	25443219MS	25446219MS	25453219MS	25456219MS

## Including air control PAMS-1/2 Air open/spring closing

DIN	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
DN15	25433802MS	25436802MS	25443802MS	25446802MS	25453802MS	25456802MS
DN20	25433803MS	25436803MS	25443803MS	25446803MS	25453803MS	25456803MS
DN25	25433805MS	25436805MS	25443805MS	25446805MS	25453805MS	25456805MS
DN32	25433807MS	25436807MS	25443807MS	25446807MS	25453807MS	25456807MS
DN40	25433809MS	25436809MS	25443809MS	25446809MS	25453809MS	25456809MS
DN50	25433811MS	25436811MS	25443811MS	25446811MS	25453811MS	25456811MS
DN65	25433813MS	25436813MS	25443813MS	25446813MS	25453813MS	25456813MS
DN80	25433815MS	25436815MS	25443815MS	25446815MS	25453815MS	25456815MS
DN100	25433817MS	25436817MS	25443817MS	25446817MS	25453817MS	25456817MS
DN125	25433818MS	25436818MS	25443818MS	25446818MS	25453818MS	25456818MS
DN150	25433819MS	25436819MS	25443819MS	25446819MS	25453819MS	25456819MS

# BUTTERFLY VALVE MALE/MALE

## Including air control PAMS-0 Air open/spring closing

DIN	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
DN15	25433402MS	25436402MS	25443402MS	25446402MS	25453402MS	25456402MS
DN20	25433403MS	25436403MS	25443403MS	25446403MS	25453403MS	25456403MS
DN25	25433405MS	25436405MS	25443405MS	25446405MS	25453405MS	25456405MS
DN32	25433407MS	25436407MS	25443407MS	25446407MS	25453407MS	25456407MS
DN40	25433409MS	25436409MS	25443409MS	25446409MS	25453409MS	25456409MS
DN50	25433411MS	25436411MS	25443411MS	25446411MS	25453411MS	25456411MS

## Including air control PAMS-8 Air open/spring closing

DIN	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
DN15	25433502MS	25436502MS	25443502MS	25446502MS	25453502MS	25456502MS
DN20	25433503MS	25436503MS	25443503MS	25446503MS	25453503MS	25456503MS
DN25	25433505MS	25436505MS	25443505MS	25446505MS	25453505MS	25456505MS
DN32	25433507MS	25436507MS	25443507MS	25446507MS	25453507MS	25456507MS
DN40	25433509MS	25436509MS	25443509MS	25446509MS	25453509MS	25456509MS
DN50	25433511MS	25436511MS	25443511MS	25446511MS	25453511MS	25456511MS
DN65	25433513MS	25436513MS	25443513MS	25446513MS	25453513MS	25456513MS
DN80	25433515MS	25436515MS	25443515MS	25446515MS	25453515MS	25456515MS
DN100	25433517MS	25436517MS	25443517MS	25446517MS	25453517MS	25456517MS

## Including air control PAMS-1/2 Air open/air closing

DIN	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
DN15	25433702MS	25436702MS	25443702MS	25446702MS	25453702MS	25456702MS
DN20	25433703MS	25436703MS	25443703MS	25446703MS	25453703MS	25456703MS
DN25	25433705MS	25436705MS	25443705MS	25446705MS	25453705MS	25456705MS
DN32	25433707MS	25436707MS	25443707MS	25446707MS	25453707MS	25456707MS
DN40	25433709MS	25436709MS	25443709MS	25446709MS	25453709MS	25456709MS
DN50	25433711MS	25436711MS	25443711MS	25446711MS	25453711MS	25456711MS
DN65	25433713MS	25436713MS	25443713MS	25446713MS	25453713MS	25456713MS
DN80	25433715MS	25436715MS	25443715MS	25446715MS	25453715MS	25456715MS
DN100	25433717MS	25436717MS	25443717MS	25446717MS	25453717MS	25456717MS
DN125	25433718MS	25436718MS	25443718MS	25446718MS	25453718MS	25456718MS
DN150	25433719MS	25436719MS	25443719MS	25446719MS	25453719MS	25456719MS

## Without handle

INCH	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
1"	25433004MS	25436004MS	25443004MS	25446004MS	25453004MS	25456004MS
1,5"	25433008MS	25436008MS	25443008MS	25446008MS	25453008MS	25456008MS
2"	25433010MS	25436010MS	25443010MS	25446010MS	25453010MS	25456010MS
2,5"	25433012MS	25436012MS	25443012MS	25446012MS	25453012MS	25456012MS
3"	25433014MS	25436014MS	25443014MS	25446014MS	25453014MS	25456014MS
4"	25433016MS	25436016MS	25443016MS	25446016MS	25453016MS	25456016MS

# BUTTERFLY VALVE MALE/MALE

## Including handle

INCH	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
1"	25433204MS	25436204MS	25443204MS	25446204MS	25453204MS	25456204MS
1,5"	25433208MS	25436208MS	25443208MS	25446208MS	25453208MS	25456208MS
2"	25433210MS	25436210MS	25443210MS	25446210MS	25453210MS	25456210MS
2,5"	25433212MS	25436212MS	25443212MS	25446212MS	25453212MS	25456212MS
3"	25433214MS	25436214MS	25443214MS	25446214MS	25453214MS	25456214MS
4"	25433216MS	25436216MS	25443216MS	25446216MS	25453216MS	25456216MS

## Including air control PAMS-1/2 Air open/spring closing

INCH	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
1"	25433804MS	25436804MS	25443804MS	25446804MS	25453804MS	25456804MS
1,5"	25433808MS	25436808MS	25443808MS	25446808MS	25453808MS	25456808MS
2"	25433810MS	25436810MS	25443810MS	25446810MS	25453810MS	25456810MS
2,5"	25433812MS	25436812MS	25443812MS	25446812MS	25453812MS	25456812MS
3"	25433814MS	25436814MS	25443814MS	25446814MS	25453814MS	25456814MS
4"	25433816MS	25436816MS	25443816MS	25446816MS	25453816MS	25456816MS

## Including air control PAMS-0 Air open/spring closing

INCH	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
1"	25433404MS	25436404MS	25443404MS	25446404MS	25453404MS	25456404MS
1,5"	25433408MS	25436408MS	25443408MS	25446408MS	25453408MS	25456408MS
2"	25433410MS	25436410MS	25443410MS	25446410MS	25453410MS	25456410MS

## Including air control PAMS-8 Air open/spring closing

INCH	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
1"	25433504MS	25436504MS	25443504MS	25446504MS	25453504MS	25456504MS
1,5"	25433508MS	25436508MS	25443508MS	25446508MS	25453508MS	25456508MS
2"	25433510MS	25436510MS	25443510MS	25446510MS	25453510MS	25456510MS
2,5"	25433512MS	25436512MS	25443512MS	25446512MS	25453512MS	25456512MS
3"	25433514MS	25436514MS	25443514MS	25446514MS	25453514MS	25456514MS
4"	25433516MS	25436516MS	25443516MS	25446516MS	25453516MS	25456516MS

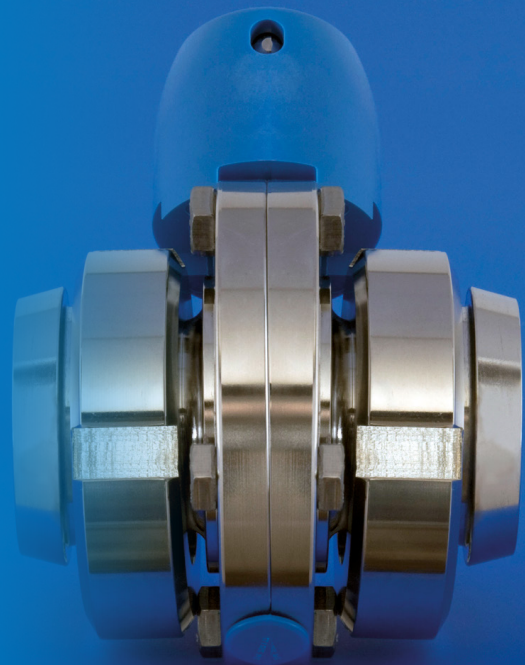
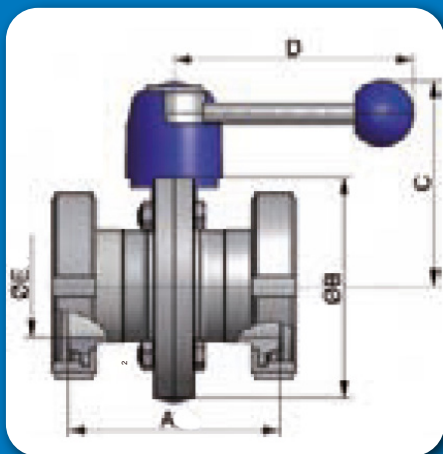
## Including air control PAMS-1/2 Air open/air closing

INCH	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
1"	25433704MS	25436704MS	25443704MS	25446704MS	25453704MS	25456704MS
1,5"	25433708MS	25436708MS	25443708MS	25446708MS	25453708MS	25456708MS
2"	25433710MS	25436710MS	25443710MS	25446710MS	25453710MS	25456710MS
2,5"	25433712MS	25436712MS	25443712MS	25446712MS	25453712MS	25456712MS
3"	25433714MS	25436714MS	25443714MS	25446714MS	25453714MS	25456714MS
4"	25433716MS	25436716MS	25443716MS	25446716MS	25453716MS	25456716MS

# BUTTERFLY VALVE LINER/LINER NUT

## TYPE SV04

DIN	A	B	C	D	E
DN15	74	87	89	122	16
DN20	76	87	89	122	20
DN25	84	87	89	122	26
DN32	92	92	91	122	32
DN40	102	97	94	122	38
DN50	106	110	100	122	50
DN65	114	127	109	150	66
DN80	134	142	116	150	81
DN100	152	162	127	150	100
DN125	180	202	155	216	125
DN150	198	231	170	216	150





# BUTTERFLY VALVE LINER/LINER NUT

## Without handle

DIN	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
DN15	25533002MS	25536002MS	25543002MS	25546002MS	25553002MS	25556002MS
DN20	25533003MS	25536003MS	25543003MS	25546003MS	25553003MS	25556003MS
DN25	25533005MS	25536005MS	25543005MS	25546005MS	25553005MS	25556005MS
DN32	25533007MS	25536007MS	25543007MS	25546007MS	25553007MS	25556007MS
DN40	25533009MS	25536009MS	25543009MS	25546009MS	25553009MS	25556009MS
DN50	25533011MS	25536011MS	25543011MS	25546011MS	25553011MS	25556011MS
DN65	25533013MS	25536013MS	25543013MS	25546013MS	25553013MS	25556013MS
DN80	25533015MS	25536015MS	25543015MS	25546015MS	25553015MS	25556015MS
DN100	25533017MS	25536017MS	25543017MS	25546017MS	25553017MS	25556017MS
DN125	25533018MS	25536018MS	25543018MS	25546018MS	25553018MS	25556018MS
DN150	25533019MS	25536019MS	25543019MS	25546019MS	25553019MS	25556019MS

## Including handle

DIN	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
DN15	25533202MS	25536202MS	25543202MS	25546202MS	25553202MS	25556202MS
DN20	25533203MS	25536203MS	25543203MS	25546203MS	25553203MS	25556203MS
DN25	25533205MS	25536205MS	25543205MS	25546205MS	25553205MS	25556205MS
DN32	25533207MS	25536207MS	25543207MS	25546207MS	25553207MS	25556207MS
DN40	25533209MS	25536209MS	25543209MS	25546209MS	25553209MS	25556209MS
DN50	25533211MS	25536211MS	25543211MS	25546211MS	25553211MS	25556211MS
DN65	25533213MS	25536213MS	25543213MS	25546213MS	25553213MS	25556213MS
DN80	25533215MS	25536215MS	25543215MS	25546215MS	25553215MS	25556215MS
DN100	25533217MS	25536217MS	25543217MS	25546217MS	25553217MS	25556217MS
DN125	25533218MS	25536218MS	25543218MS	25546218MS	25553218MS	25556218MS
DN150	25533219MS	25536219MS	25543219MS	25546219MS	25553219MS	25556219MS

## Including air control PAMS-1/2 Air open/spring closing

DIN	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
DN15	25533802MS	25536802MS	25543802MS	25546802MS	25553802MS	25556802MS
DN20	25533803MS	25536803MS	25543803MS	25546803MS	25553803MS	25556803MS
DN25	25533805MS	25536805MS	25543805MS	25546805MS	25553805MS	25556805MS
DN32	25533807MS	25536807MS	25543807MS	25546807MS	25553807MS	25556807MS
DN40	25533809MS	25536809MS	25543809MS	25546809MS	25553809MS	25556809MS
DN50	25533811MS	25536811MS	25543811MS	25546811MS	25553811MS	25556811MS
DN65	25533813MS	25536813MS	25543813MS	25546813MS	25553813MS	25556813MS
DN80	25533815MS	25536815MS	25543815MS	25546815MS	25553815MS	25556815MS
DN100	25533817MS	25536817MS	25543817MS	25546817MS	25553817MS	25556817MS
DN125	25533818MS	25536818MS	25543818MS	25546818MS	25553818MS	25556818MS
DN150	25533819MS	25536819MS	25543819MS	25546819MS	25553819MS	25556819MS

# BUTTERFLY VALVE LINER/LINER NUT

## Including air control PAMS-0 Air open/spring closing

DIN	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
DN15	25533402MS	25536402MS	25543402MS	25546402MS	25553402MS	25556402MS
DN20	25533403MS	25536403MS	25543403MS	25546403MS	25553403MS	25556403MS
DN25	25533405MS	25536405MS	25543405MS	25546405MS	25553405MS	25556405MS
DN32	25533407MS	25536407MS	25543407MS	25546407MS	25553407MS	25556407MS
DN40	25533409MS	25536409MS	25543409MS	25546409MS	25553409MS	25556409MS
DN50	25533411MS	25536411MS	25543411MS	25546411MS	25553411MS	25556411MS

## Including air control PAMS-8 Air open/spring closing

DIN	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
DN15	25533502MS	25536502MS	25543502MS	25546502MS	25553502MS	25556502MS
DN20	25533503MS	25536503MS	25543503MS	25546503MS	25553503MS	25556503MS
DN25	25533505MS	25536505MS	25543505MS	25546505MS	25553505MS	25556505MS
DN32	25533507MS	25536507MS	25543507MS	25546507MS	25553507MS	25556507MS
DN40	25533509MS	25536509MS	25543509MS	25546509MS	25553509MS	25556509MS
DN50	25533511MS	25536511MS	25543511MS	25546511MS	25553511MS	25556511MS
DN65	25533513MS	25536513MS	25543513MS	25546513MS	25553513MS	25556513MS
DN80	25533515MS	25536515MS	25543515MS	25546515MS	25553515MS	25556515MS
DN100	25533517MS	25536517MS	25543517MS	25546517MS	25553517MS	25556517MS

## Including air control PAMS-1/2 Air open/air closing

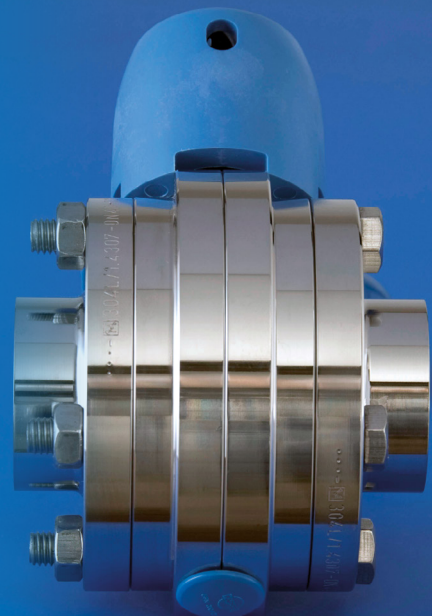
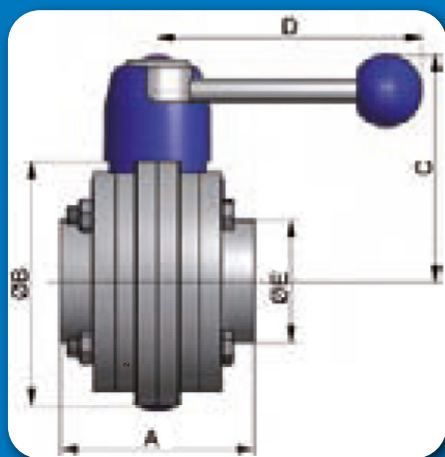
DIN	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
DN15	25533702MS	25536702MS	25543702MS	25546702MS	25553702MS	25556702MS
DN20	25533703MS	25536703MS	25543703MS	25546703MS	25553703MS	25556703MS
DN25	25533705MS	25536705MS	25543705MS	25546705MS	25553705MS	25556705MS
DN32	25533707MS	25536707MS	25543707MS	25546707MS	25553707MS	25556707MS
DN40	25533709MS	25536709MS	25543709MS	25546709MS	25553709MS	25556709MS
DN50	25533711MS	25536711MS	25543711MS	25546711MS	25553711MS	25556711MS
DN65	25533713MS	25536713MS	25543713MS	25546713MS	25553713MS	25556713MS
DN80	25533715MS	25536715MS	25543715MS	25546715MS	25553715MS	25556715MS
DN100	25533717MS	25536717MS	25543717MS	25546717MS	25553717MS	25556717MS
DN125	25533718MS	25536718MS	25543718MS	25546718MS	25553718MS	25556718MS
DN150	25533719MS	25536719MS	25543719MS	25546719MS	25553719MS	25556719MS

# BUTTERFLY VALVE FLANGE/FLANGE

SV04

DIN	A	B	C	D	E
DN15	78	87	89	122	19
DN20	78	87	89	122	23
DN25	78	87	89	122	29
DN32	78	92	91	122	35
DN40	88	97	94	122	41
DN50	88	110	100	122	53
DN65	88	127	109	150	70
DN80	88	142	116	150	85
DN100	88	162	127	150	104
DN125	112	202	155	216	129
DN150	112	231	170	216	154

INCH	A	B	C	D	E
1" (25,4)	78	87	89	122	25,4
1,5" (38,1)	88	97	94	122	38,1
2" (50,8)	88	110	100	122	50,8
2,5" (63,5)	88	127	109	150	63,5
3" (76,1)	88	142	116	150	76,1
4" (101,6)	88	162	127	150	101,6



### Without handle

DIN	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
DN15	25833002MS	25836002MS	25843002MS	25846002MS	25853002MS	25856002MS
DN20	25833003MS	25836003MS	25843003MS	25846003MS	25853003MS	25856003MS
DN25	25833005MS	25836005MS	25843005MS	25846005MS	25853005MS	25856005MS
DN32	25833007MS	25836007MS	25843007MS	25846007MS	25853007MS	25856007MS
DN40	25833009MS	25836009MS	25843009MS	25846009MS	25853009MS	25856009MS
DN50	25833011MS	25836011MS	25843011MS	25846011MS	25853011MS	25856011MS
DN65	25833013MS	25836013MS	25843013MS	25846013MS	25853013MS	25856013MS
DN80	25833015MS	25836015MS	25843015MS	25846015MS	25853015MS	25856015MS
DN100	25833017MS	25836017MS	25843017MS	25846017MS	25853017MS	25856017MS
DN125	25833018MS	25836018MS	25843018MS	25846018MS	25853018MS	25856018MS
DN150	25833019MS	25836019MS	25843019MS	25846019MS	25853019MS	25856019MS

### Including handle

DIN	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
DN15	25833202MS	25836202MS	25843202MS	25846202MS	25853202MS	25856202MS
DN20	25833203MS	25836203MS	25843203MS	25846203MS	25853203MS	25856203MS
DN25	25833205MS	25836205MS	25843205MS	25846205MS	25853205MS	25856205MS
DN32	25833207MS	25836207MS	25843207MS	25846207MS	25853207MS	25856207MS
DN40	25833209MS	25836209MS	25843209MS	25846209MS	25853209MS	25856209MS
DN50	25833211MS	25836211MS	25843211MS	25846211MS	25853211MS	25856211MS
DN65	25833213MS	25836213MS	25843213MS	25846213MS	25853213MS	25856213MS
DN80	25833215MS	25836215MS	25843215MS	25846215MS	25853215MS	25856215MS
DN100	25833217MS	25836217MS	25843217MS	25846217MS	25853217MS	25856217MS
DN125	25833218MS	25836218MS	25843218MS	25846218MS	25853218MS	25856218MS
DN150	25833219MS	25836219MS	25843219MS	25846219MS	25853219MS	25856219MS

### Including air control PAMS-1/2 Air open/spring closing

DIN	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
DN15	25833802MS	25836802MS	25843802MS	25846802MS	25853802MS	25856802MS
DN20	25833803MS	25836803MS	25843803MS	25846803MS	25853803MS	25856803MS
DN25	25833805MS	25836805MS	25843805MS	25846805MS	25853805MS	25856805MS
DN32	25833807MS	25836807MS	25843807MS	25846807MS	25853807MS	25856807MS
DN40	25833809MS	25836809MS	25843809MS	25846809MS	25853809MS	25856809MS
DN50	25833811MS	25836811MS	25843811MS	25846811MS	25853811MS	25856811MS
DN65	25833813MS	25836813MS	25843813MS	25846813MS	25853813MS	25856813MS
DN80	25833815MS	25836815MS	25843815MS	25846815MS	25853815MS	25856815MS
DN100	25833817MS	25836817MS	25843817MS	25846817MS	25853817MS	25856817MS
DN125	25833818MS	25836818MS	25843818MS	25846818MS	25853818MS	25856818MS
DN150	25833819MS	25836819MS	25843819MS	25846819MS	25853819MS	25856819MS

# BUTTERFLY VALVE FLANGE/FLANGE

## Including air control PAMS-0 Air open/spring closing

DIN	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
DN15	25833402MS	25836402MS	25843402MS	25846402MS	25853402MS	25856402MS
DN20	25833403MS	25836403MS	25843403MS	25846403MS	25853403MS	25856403MS
DN25	25833405MS	25836405MS	25843405MS	25846405MS	25853405MS	25856405MS
DN32	25833407MS	25836407MS	25843407MS	25846407MS	25853407MS	25856407MS
DN40	25833409MS	25836409MS	25843409MS	25846409MS	25853409MS	25856409MS
DN50	25833411MS	25836411MS	25843411MS	25846411MS	25853411MS	25856411MS

## Including air control PAMS-8 Air open/spring closing

DIN	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
DN15	25833502MS	25836502MS	25843502MS	25846502MS	25853502MS	25856502MS
DN20	25833503MS	25836503MS	25843503MS	25846503MS	25853503MS	25856503MS
DN25	25833505MS	25836505MS	25843505MS	25846505MS	25853505MS	25856505MS
DN32	25833507MS	25836507MS	25843507MS	25846507MS	25853507MS	25856507MS
DN40	25833509MS	25836509MS	25843509MS	25846509MS	25853509MS	25856509MS
DN50	25833511MS	25836511MS	25843511MS	25846511MS	25853511MS	25856511MS
DN65	25833513MS	25836513MS	25843513MS	25846513MS	25853513MS	25856513MS
DN80	25833515MS	25836515MS	25843515MS	25846515MS	25853515MS	25856515MS
DN100	25833517MS	25836517MS	25843517MS	25846517MS	25853517MS	25856517MS

## Including air control PAMS-1/2 Air open/air closing

DIN	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
DN15	25833702MS	25836702MS	25843702MS	25846702MS	25853702MS	25856702MS
DN20	25833703MS	25836703MS	25843703MS	25846703MS	25853703MS	25856703MS
DN25	25833705MS	25836705MS	25843705MS	25846705MS	25853705MS	25856705MS
DN32	25833707MS	25836707MS	25843707MS	25846707MS	25853707MS	25856707MS
DN40	25833709MS	25836709MS	25843709MS	25846709MS	25853709MS	25856709MS
DN50	25833711MS	25836711MS	25843711MS	25846711MS	25853711MS	25856711MS
DN65	25833713MS	25836713MS	25843713MS	25846713MS	25853713MS	25856713MS
DN80	25833715MS	25836715MS	25843715MS	25846715MS	25853715MS	25856715MS
DN100	25833717MS	25836717MS	25843717MS	25846717MS	25853717MS	25856717MS
DN125	25833718MS	25836718MS	25843718MS	25846718MS	25853718MS	25856718MS
DN150	25833719MS	25836719MS	25843719MS	25846719MS	25853719MS	25856719MS

## Without handle

INCH	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
1"	25833004MS	25836004MS	25843004MS	25846004MS	25853004MS	25856004MS
1,5"	25833008MS	25836008MS	25843008MS	25846008MS	25853008MS	25856008MS
2"	25833010MS	25836010MS	25843010MS	25846010MS	25853010MS	25856010MS
2,5"	25833012MS	25836012MS	25843012MS	25846012MS	25853012MS	25856012MS
3"	25833014MS	25836014MS	25843014MS	25846014MS	25853014MS	25856014MS
4"	25833016MS	25836016MS	25843016MS	25846016MS	25853016MS	25856016MS

### Including handle

INCH	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
1"	25833204MS	25836204MS	25843204MS	25846204MS	25853204MS	25856204MS
1,5"	25833208MS	25836208MS	25843208MS	25846208MS	25853208MS	25856208MS
2"	25833210MS	25836210MS	25843210MS	25846210MS	25853210MS	25856210MS
2,5"	25833212MS	25836212MS	25843212MS	25846212MS	25853212MS	25856212MS
3"	25833214MS	25836214MS	25843214MS	25846214MS	25853214MS	25856214MS
4"	25833216MS	25836216MS	25843216MS	25846216MS	25853216MS	25856216MS

### Including air control PAMS-1/2 Air open/spring closing

INCH	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
1"	25833804MS	25836804MS	25843804MS	25846804MS	25853804MS	25856804MS
1,5"	25833808MS	25836808MS	25843808MS	25846808MS	25853808MS	25856808MS
2"	25833810MS	25836810MS	25843810MS	25846810MS	25853810MS	25856810MS
2,5"	25833812MS	25836812MS	25843812MS	25846812MS	25853812MS	25856812MS
3"	25833814MS	25836814MS	25843814MS	25846814MS	25853814MS	25856814MS
4"	25833816MS	25836816MS	25843816MS	25846816MS	25853816MS	25856816MS

### Including air control PAMS-0 Air open/spring closing

INCH	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
1"	25833404MS	25836404MS	25843404MS	25846404MS	25853404MS	25856404MS
1,5"	25833408MS	25836408MS	25843408MS	25846408MS	25853408MS	25856408MS
2"	25833410MS	25836410MS	25843410MS	25846410MS	25853410MS	25856410MS

### Including air control PAMS-8 Air open/spring closing

INCH	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
1"	25833504MS	25836504MS	25843504MS	25846504MS	25853504MS	25856504MS
1,5"	25833508MS	25836508MS	25843508MS	25846508MS	25853508MS	25856508MS
2"	25833510MS	25836510MS	25843510MS	25846510MS	25853510MS	25856510MS
2,5"	25833512MS	25836512MS	25843512MS	25846512MS	25853512MS	25856512MS
3"	25833514MS	25836514MS	25843514MS	25846514MS	25853514MS	25856514MS
4"	25833516MS	25836516MS	25843516MS	25846516MS	25853516MS	25856516MS

### Including air control PAMS-1/2 Air open/air closing

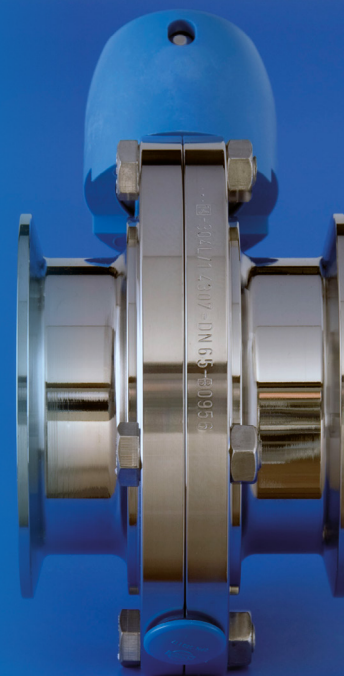
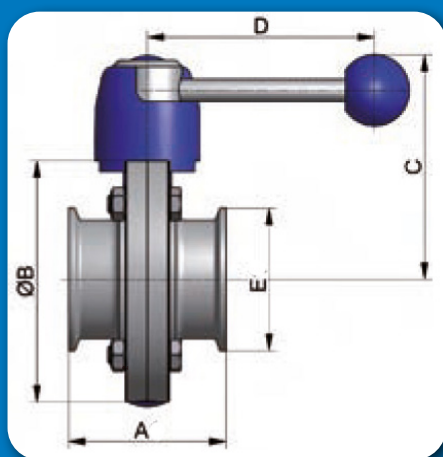
INCH	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
1"	25833704MS	25836704MS	25843704MS	25846704MS	25853704MS	25856704MS
1,5"	25833708MS	25836708MS	25843708MS	25846708MS	25853708MS	25856708MS
2"	25833710MS	25836710MS	25843710MS	25846710MS	25853710MS	25856710MS
2,5"	25833712MS	25836712MS	25843712MS	25846712MS	25853712MS	25856712MS
3"	25833714MS	25836714MS	25843714MS	25846714MS	25853714MS	25856714MS
4"	25833716MS	25836716MS	25843716MS	25846716MS	25853716MS	25856716MS

# BUTTERFLY VALVE CLAMP/CLAMP

## TYPE SV04

DIN	A	B	C	D	E
DN25	64	87	89	122	50,5
DN32	68	92	91	122	50,5
DN40	72	97	94	122	50,5
DN50	72	110	100	122	64,0
DN65	76	127	109	150	91,0
DN80	88	142	116	150	106,0
DN100	92	162	127	150	119,0

INCH	A	B	C	D	E
1" (25,4)	64	87	89	122	50,5
1,5" (38,1)	72	97	94	122	50,5
2" (50,8)	72	110	100	122	64,0
2,5" (63,5)	76	127	109	150	77,5
3" (76,1)	78	142	116	150	91,0
4" (101,6)	92	162	127	150	119,0



### Without handle

DIN	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
DN25	25933005MS	25936005MS	25943005MS	25946005MS	25953005MS	25956005MS
DN32	25933007MS	25936007MS	25943007MS	25946007MS	25953007MS	25956007MS
DN40	25933009MS	25936009MS	25943009MS	25946009MS	25953009MS	25956009MS
DN50	25933011MS	25936011MS	25943011MS	25946011MS	25953011MS	25956011MS
DN65	25933013MS	25936013MS	25943013MS	25946013MS	25953013MS	25956013MS
DN80	25933015MS	25936015MS	25943015MS	25946015MS	25953015MS	25956015MS
DN100	25933017MS	25936017MS	25943017MS	25946017MS	25953017MS	25956017MS

### Including handle

DIN	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
DN25	25933205MS	25936205MS	25943205MS	25946205MS	25953205MS	25956205MS
DN32	25933207MS	25936207MS	25943207MS	25946207MS	25953207MS	25956207MS
DN40	25933209MS	25936209MS	25943209MS	25946209MS	25953209MS	25956209MS
DN50	25933211MS	25936211MS	25943211MS	25946211MS	25953211MS	25956211MS
DN65	25933213MS	25936213MS	25943213MS	25946213MS	25953213MS	25956213MS
DN80	25933215MS	25936215MS	25943215MS	25946215MS	25953215MS	25956215MS
DN100	25933217MS	25936217MS	25943217MS	25946217MS	25953217MS	25956217MS

### Including air control PAMS-1/2 Air open/spring closing

DIN	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
DN25	25933905MS	25936905MS	25943905MS	25946905MS	25953905MS	25956905MS
DN32	25933907MS	25936907MS	25943907MS	25946907MS	25953907MS	25956907MS
DN40	25933909MS	25936909MS	25943909MS	25946909MS	25953909MS	25956909MS
DN50	25933911MS	25936911MS	25943911MS	25946911MS	25953911MS	25956911MS
DN65	25933913MS	25936913MS	25943913MS	25946913MS	25953913MS	25956913MS
DN80	25933915MS	25936915MS	25943915MS	25946915MS	25953915MS	25956915MS
DN100	25933917MS	25936917MS	25943917MS	25946917MS	25953917MS	25956917MS

### Including air control PAMS-0 Air open/spring closing

DIN	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
DN25	25933405MS	25936405MS	25943405MS	25946405MS	25953405MS	25956405MS
DN32	25933407MS	25936407MS	25943407MS	25946407MS	25953407MS	25956407MS
DN40	25933409MS	25936409MS	25943409MS	25946409MS	25953409MS	25956409MS
DN50	25933411MS	25936411MS	25943411MS	25946411MS	25953411MS	25956411MS



# BUTTERFLY VALVE CLAMP/CLAMP

## Including air control PAMS-8 Air open/spring closing

DIN	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
DN25	25933505MS	25936505MS	25943505MS	25946505MS	25953505MS	25956505MS
DN32	25933507MS	25936507MS	25943507MS	25946507MS	25953507MS	25956507MS
DN40	25933509MS	25936509MS	25943509MS	25946509MS	25953509MS	25956509MS
DN50	25933511MS	25936511MS	25943511MS	25946511MS	25953511MS	25956511MS
DN65	25933513MS	25936513MS	25943513MS	25946513MS	25953513MS	25956513MS
DN80	25933515MS	25936515MS	25943515MS	25946515MS	25953515MS	25956515MS
DN100	25933517MS	25936517MS	25943517MS	25946517MS	25953517MS	25956517MS

## Including air control PAMS-1/2 Air open/air closing

DIN	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
DN25	25933705MS	25936705MS	25943705MS	25946705MS	25953705MS	25956705MS
DN32	25933707MS	25936707MS	25943707MS	25946707MS	25953707MS	25956707MS
DN40	25933709MS	25936709MS	25943709MS	25946709MS	25953709MS	25956709MS
DN50	25933711MS	25936711MS	25943711MS	25946711MS	25953711MS	25956711MS
DN65	25933713MS	25936713MS	25943713MS	25946713MS	25953713MS	25956713MS
DN80	25933715MS	25936715MS	25943715MS	25946715MS	25953715MS	25956715MS
DN100	25933717MS	25936717MS	25943717MS	25946717MS	25953717MS	25956717MS

## Without handle

INCH	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
1"	25933004MS	25936004MS	25943004MS	25946004MS	25953004MS	25956004MS
1,5"	25933008MS	25936008MS	25943008MS	25946008MS	25953008MS	25956008MS
2"	25933010MS	25936010MS	25943010MS	25946010MS	25953010MS	25956010MS
2,5"	25933012MS	25936012MS	25943012MS	25946012MS	25953012MS	25956012MS
3"	25933014MS	25936014MS	25943014MS	25946014MS	25953014MS	25956014MS
4"	25933016MS	25936016MS	25943016MS	25946016MS	25953016MS	25956016MS

## Including handle

INCH	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
1"	25933204MS	25936204MS	25943204MS	25946204MS	25953204MS	25956204MS
1,5"	25933208MS	25936208MS	25943208MS	25946208MS	25953208MS	25956208MS
2"	25933210MS	25936210MS	25943210MS	25946210MS	25953210MS	25956210MS
2,5"	25933212MS	25936212MS	25943212MS	25946212MS	25953212MS	25956212MS
3"	25933214MS	25936214MS	25943214MS	25946214MS	25953214MS	25956214MS
4"	25933216MS	25936216MS	25943216MS	25946216MS	25953216MS	25956216MS

Including air control PAMS-1/2 Air open/spring closing

INCH	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
1"	25933804MS	25936804MS	25943804MS	25946804MS	25953804MS	25956804MS
1,5"	25933808MS	25936808MS	25943808MS	25946808MS	25953808MS	25956808MS
2"	25933810MS	25936810MS	25943810MS	25946810MS	25953810MS	25956810MS
2,5"	25933812MS	25936812MS	25943812MS	25946812MS	25953812MS	25956812MS
3"	25933814MS	25936814MS	25943814MS	25946814MS	25953814MS	25956814MS
4"	25933816MS	25936816MS	25943816MS	25946816MS	25953816MS	25956816MS

Including air control PAMS-0 Air open/spring closing

INCH	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
1"	25933404MS	25936404MS	25943404MS	25946404MS	25953404MS	25956404MS
1,5"	25933408MS	25936408MS	25943408MS	25946408MS	25953408MS	25956408MS
2"	25933410MS	25936410MS	25943410MS	25946410MS	25953410MS	25956410MS

Including air control PAMS-8 Air open/spring closing

INCH	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
1"	25933504MS	25936504MS	25943504MS	25946504MS	25953504MS	25956504MS
1,5"	25933508MS	25936508MS	25943508MS	25946508MS	25953508MS	25956508MS
2"	25933510MS	25936510MS	25943510MS	25946510MS	25953510MS	25956510MS
2,5"	25933512MS	25936512MS	25943512MS	25946512MS	25953512MS	25956512MS
3"	25933514MS	25936514MS	25943514MS	25946514MS	25953514MS	25956514MS
4"	25933516MS	25936516MS	25943516MS	25946516MS	25953516MS	25956516MS

Including air control PAMS-1/2 Air open/air closing

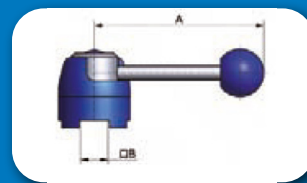
INCH	304/EPDM	316/EPDM	304/FKM	316/FKM	304/VMQ	316/VMQ
1"	25933704MS	25936704MS	25943704MS	25946704MS	25953704MS	25956704MS
1,5"	25933708MS	25936708MS	25943708MS	25946708MS	25953708MS	25956708MS
2"	25933710MS	25936710MS	25943710MS	25946710MS	25953710MS	25956710MS
2,5"	25933712MS	25936712MS	25943712MS	25946712MS	25953712MS	25956712MS
3"	25933714MS	25936714MS	25943714MS	25946714MS	25953714MS	25956714MS
4"	25933716MS	25936716MS	25943716MS	25946716MS	25953716MS	25956716MS

# HANDLES

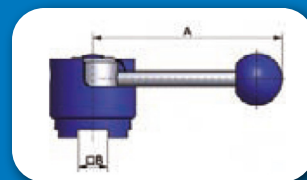
## TYPE SV04

DIN / INCH	HANDLES	A	B	KG	ART.
15 - 50 / 1" - 2"	Handle SV04 (2 positions)	122,0	9,5	0,360	27134011MS
15 - 50	Handle SV04 for proximity switch 12mm (2 positions)	122,0	9,5	0,380	27134425MS
15 - 50 / 1" - 2"	Handle SV04 stainless steel (2 positions)	122,0	9,5	0,410	27134010MS
15 - 100 / 1" - 4"	Handle SV04 adjustable	135,0	9,5	0,590	27134413MS
15 - 100 / 1" - 4"	Handle SV04 scissors handle	145,0	9,5		27134029MS
65 - 100 / 2,5" - 4"	Handle SV04 (2 positions)	150,0	9,5	0,380	27134017MS
65 - 100	Handle SV04 for proximity switch 12mm (2 positions)	150,0	9,5	0,400	27134426MS
65 - 100 / 2,5" - 4"	Handle SV04 stainless steel (2 positions)	150,0	9,5	0,840	27134016MS
125 - 150	Handle SV04 (2 positions)	216,0	14,0	0,820	27134019MS
125 - 150	Handle SV04 for proximity switch 12mm (2 positions)	216,0	14,0	0,860	27134427MS
125 - 150	Handle SV04 stainless steel (2 positions)	216,0	14,0	1,830	27134018MS
125 - 150	Handle SV04 adjustable	233,0	14,0	2,170	27134419MS

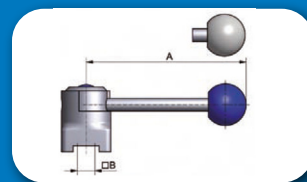
Handle SV04



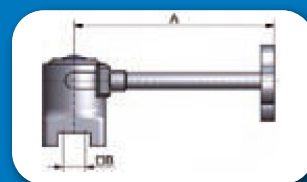
Handle SV04 for proximity switch 12mm



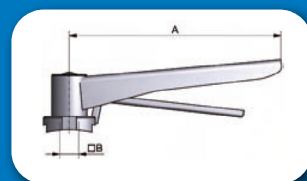
Handle SV04 stainless steel



Handle SV04 adjustable



Handle SV04 scissors handle



### Handles Type SV04

The handles for the purpose of the butterfly valve of M&S are distinctive in the market. They stand out with their blue plastic cover between all other products. On the outside a mechanic sees directly which brand the valve has. The cover is tested and not only easy cleanable. The cover is exactly tailored and has no leeway. This provides better centering of the shaft and therefore a longer lifespan of all the components including seal.

The handle is available in various designs:

- Standard 2 positions handle; DN15-50/1"-2", DN65-100/2.5"-4" and DN125-150. The blue cap is also available in different colours. The handle is in different positions available on request.
- 2 positions handle with proximity switch 12mm; DN15-50/1"-2", DN65-100/2.5"-4" and DN125-150.
- 2 positions handle stainless steel; DN15-50/1"-2", DN65-100/2.5"-4" and DN125-150.
- Adjustable handle; (stainless steel sleeve) DN15-100/1"-4" and DN125-150.
- Scissors handle; 1 version for DN15-100/1"-4"

The handles are standard mechanically locked, but also available in a version which can be provided with a padlock.

# PNEUMATIC ACTUATORS

## TYPE SV04

AIR CONTROL	A	B	C	D	E	KG	ART.
PAMS-0 air open/spring closing	149	70	9,5	24	8	1,900	27833030MS
PAMS-0 air open/air closing	149	70	9,5	24	8	1,900	27833029MS
PAMS-1 air open/spring closing	149	85	9,5	24	8	2,700	27833032MS
PAMS-1 air open/air closing	149	85	9,5	24	8	2,700	27833031MS
PAMS-2 air open/spring closing	209	114	14	32	8	6,400	27833034MS
PAMS-2 air open/air closing	209	114	14	32	8	6,400	27833033MS
PAMS-8 air open/spring closing	180	109	9,5	24	8	2,240	27830032MS

NAME	HOUSE	SIZES BUTTERFLY VALVE	MAX. CLOSING TIME(NM)	OPERATING PRESSURE (BAR)	AIR CONSUMPTION (1 / HUB)
PAMS-0 L/V	Stainless steel	DN15-50 / 1"-2"	35	4.8 - 8.0	0.8 - 1.2
PAMS-0 L/L	Stainless steel	DN15-100 / 1"-4"	50	3.0 - 8.0	0.5 - 1.2
PAMS-1 L/V	Stainless steel	DN15-100 / 1"-4"	65	4.8 - 8.0	1.2 - 2.0
PAMS-1 L/L	Stainless steel	DN15-100 / 1"-4"	80	3.0 - 8.0	0.8 - 2.0
PAMS-2 L/V	Stainless steel	DN125-200	130	4.8 - 8.0	3.0 - 5.0
PAMS-2 L/L	Stainless steel	DN125-200	130	3.0 - 8.0	1.9 - 5.0

### Actuator Type PAMS

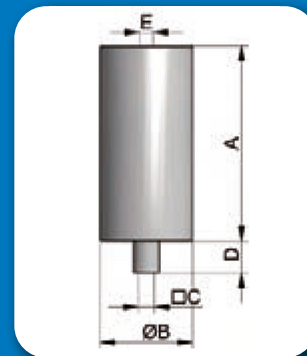
The actuator of M&S are robust and powerful. Based on findings and wishes from the market, M&S regularly upgrades the PAMS. The result is the most actual types in different sizes and control options. The actuators are welded and therefore not maintainable. The PAMS is a proven good control and maintenance is not necessary. The welded house has a strong tense spring, which is safe. The PAMS is available in 7 different types and 3 types of them are also available in air/air.

The possibilities are:

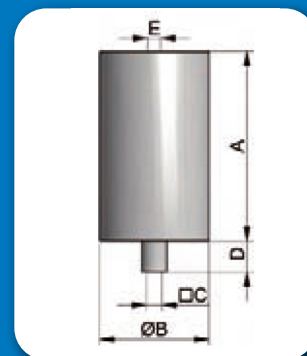
- The different air controls are available with possibilities for proximity switch.
- On the output shaft of the air engine is a switch cover mounted which the position reports. This is a completely safe CE solution.
- The actuators are available with a control head. In this control is a status report and a solenoid valve for direct management of the valve. The management is possible with a standard head (TOP16). These are afterwards to assemble or disassemble on every type.
- There is a possibility to provide the actuator with a positioner.

The details are available on our site.  
[www.sks-online.com](http://www.sks-online.com).

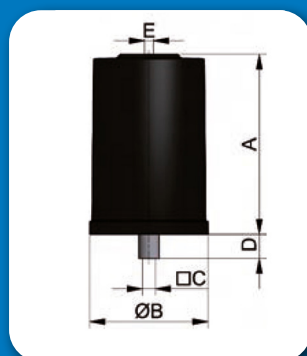
PAMS-0 A/S



PAMS-1/2 A/S & A/A



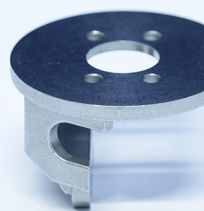
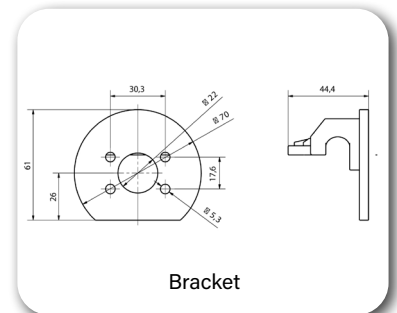
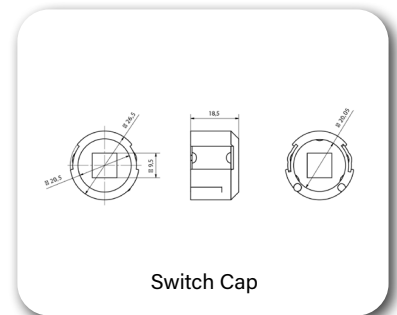
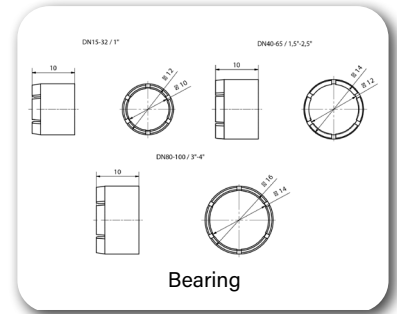
PAMS-8 A/S



# SPARE PARTS

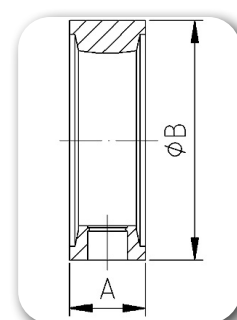
## TYPE SV04

TYPE	DIN	KG	ART. NR.
Mounting bracket between flanges	15 - 100	0,180	27134156MS
Mounting bracket other versions	15 - 100 / 1" - 4"	0,200	27134155MS
	125 - 150	0,310	27134169MS
Switch cam	15 - 100 / 1" - 4"	0,200	27134171MS
Bearing	125 - 150	0,300	27134172MS
	15 - 32 / 1"		27100805MS
	40 - 65 / 1,5" - 2,5		27100806MS
	80 - 100 / 3" - 4"		27100807MS
	125 - 150		27100815MS
Prox switch M12x1 24VDC NO/NC 2 wires IP 67 Sn=4mm plastic housing	15 - 200 / 1" - 4"	0,100	27900087
Prox switch M12x1 24VDC NO/NC 3 wires IP 67 Sn=4mm plastic housing	15 - 200 / 1" - 4"	0,100	27900090
Prox switch M12x1 24VDC NO PNP 3 wires IP 68 Sn=4mm stainless steel housing	15 - 200 / 1" - 4"	0,020	27900096MS
Prox switch M12x1 24VDC NO PNP 3 wires IP 67 Sn=4mm nickel-plated brass housing	15 - 200 / 1" - 4"	0,040	27900097MS



## Valve seal

DIN	HNBR	EPDM	FKM (VITON)
DN15	27700337MS	27700279MS	27700254MS
DN20	27700337MS	27700279MS	27700254MS
DN25	27100338MS	27100280MS	27100255MS
DN32	27100339MS	27100282MS	27100257MS
DN40	27100341MS	27100284MS	27100259MS
DN50	27100343MS	27100286MS	27100261MS
DN65	27100345MS	27100288MS	27100263MS
DN80	27100347MS	27100290MS	27100265MS
DN100	27100349MS	27100292MS	27100267MS
DN125	27100351MS	27100294MS	27100269MS
DN150	27100352MS	27100295MS	27100270MS

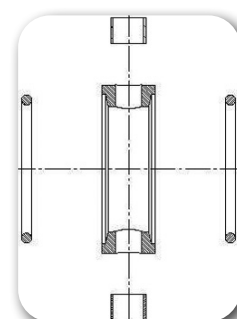


INCH	HNBR	EPDM	FKM (VITON)	VMQ (SILICONE)
1"	27700337MS	27700279MS	27700254MS	27700229MS
1,5"	27700340MS	27700283MS	27700258MS	27700233MS
2"	27700342MS	27700285MS	27700260MS	27700235MS
2,5"	27700344MS	27700287MS	27700262MS	27700237MS
3"	27700346MS	27700289MS	27700264MS	27700239MS
4"	27700350MS	27700293MS	27700268MS	27700243MS

ISO	HNBR	EPDM	FKM (VITON)	VMQ (SILICONE)
33.7	27100338MS	27100280MS	27100255MS	27100230MS
42.4	27100339MS	27100282MS	27100257MS	27100232MS
48.3	27100341MS	27100284MS	27100259MS	27100234MS
60.3	27100343MS	27100286MS	27100261MS	27100236MS
76.1	27100345MS	27100288MS	27100263MS	27100238MS
88.9	27100347MS	27100290MS	27100265MS	27100240MS
114.3	27100349MS	27100292MS	27100267MS	27100242MS

## Service kit flange/flange

DIN	ART. NR. VMQ	ART. NR. EPDM	ART. NR. FKM	ART. NR. HNBR
DN25	27500230MS	27500280MS	27500255MS	27500338MS
DN32	27500232MS	27500282MS	27500257MS	27500345MS
DN40	27500234MS	27500284MS	27500259MS	27500339MS
DN50	27500236MS	27500286MS	27500261MS	27500340MS
DN65	27500238MS	27500288MS	27500263MS	27500341MS
DN80	27500240MS	27500290MS	27500265MS	27500343MS
DN100	27500242MS	27500292MS	27500267MS	27500344MS
DN125	27500244MS	27500294MS	27500269MS	27500351MS
DN150	27500245MS	27500295MS	27500270MS	-



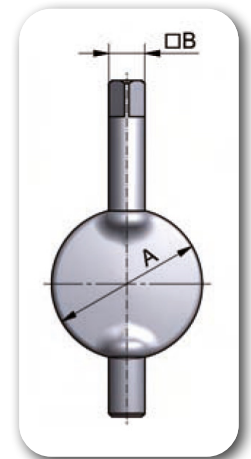
INCH	ART. NR. VMQ	ART. NR. EPDM	ART. NR. FKM	ART. NR. HNBR
1" / 15 - 20	27700229MS	27700279MS	27100254MS	27700337MS
1,5"	27700233MS	27700283MS	27100258MS	27700339MS
2"	27700235MS	27700285MS	27100260MS	27700340MS
2,5"	27700237MS	27700287MS	27100262MS	27700341MS
3"	27700239MS	27700289MS	27100264MS	27700342MS

# VALVE DISC

## TYPE SV04

DIN	A	B	KG	304	316
DN25	26,0	9,5	0,050	27134105MS	27138105MS
DN32	32,0	9,5	0,060	27134107MS	27138107MS
DN40	38,0	9,5	0,090	27134109MS	7138109MS
DN50	50,0	9,5	0,135	27134111MS	27138111MS
DN65	66,0	9,5	0,225	27134113MS	27138113MS
DN80	81,0	9,5	0,325	27134115MS	27138115MS
DN100	100,0	9,5	0,620	27134117MS	27138117MS
DN125	125,0	14,0	1,370	-	27138119MS
DN150	150,0	14,0	1,820	-	27138121MS

INCH	A	B	KG	304	316
1" / 15 - 20	22,7	9,5	0,050	27134104MS	27138104MS
1,5"	35,7	9,5	0,085	27134108MS	27138108MS
2"	48,7	9,5	0,135	27134110MS	27138110MS
2,5"	60,7	9,5	0,210	27134112MS	27138112MS
3"	72,0	9,5	0,285	27134114MS	27138114MS
4"	97,8	9,5	0,620	-	27138116MS



Within the complete butterfly valve program, M&S Armaturen also has a leak detection butterfly valve. This valve type LSV07 is based on the normal butterfly valve type SV04 and is used in places where mixing of 2 media must be avoided.

A leak detection butterfly valve can be an alternative for a double seat valve. Technically, the valve meets all requirements. It is available in a manually operated and pneumatically operated version. When the position is closed, the small leakage chamber is open and any leaked liquid can drain away. It is possible to clean or sterilize the leakage area with the flushing connection. When the position is open, the leakage chamber and flushing connection is closed.

The valves and seals are marked and provided with material number, size and batch number. A 3.1 certificate is possible.

The seals are produced from FDA approved materials. The flexibility of the M&S Armaturen makes it possible to produce the butterfly valve entirely according to customer requirements (special connections or installation dimensions).

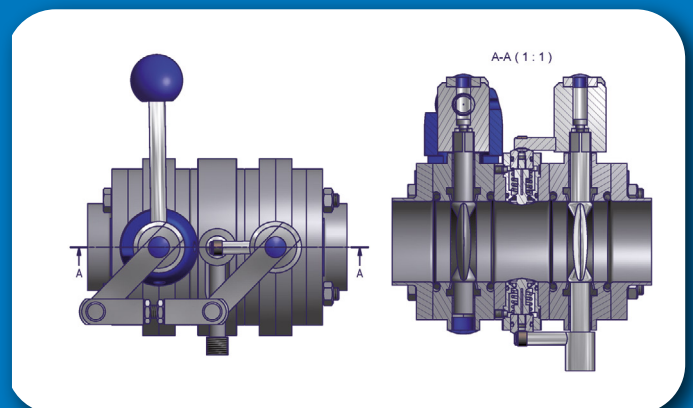
Unique features:

- Between flanges construction for easy disassembly
- Short design
- Small leakage chamber for operational reliability
- Based on type SV04 (SV04 has an EHEDG approval)
- Separate control flush connection
- Simple structure of position reporting
- Available in sizes NW25-150 and 1"-4"
- Vacuum fixed sealing concept

MATERIAL	TYPE SV04
Product contact parts	Stainless steel 304(L) or Stainless steel 316L
Internal surface roughness	Ra <0,8 µm
Other stainless steel parts	W.St. 1.4301 / AISI 304
Standard seals	EPDM
Maximum operating pressure	10 bar
Maximum temperature	Elastomer dependent
Sizes	DN25 - DN 150 and 1" t/m 4"
Opional seals	EPDM, VMQ (silicone), FKM (Viton) and HNBR.

PERFORMANCE	
Connection	Between flanges 2 connections for flushing and leak detection
Standard control	Including handles (2 positions) Handle options on request
Pneumatic control	Double air & air/spring (2 versions)
Required air pressure	Depending on the type of actuator
Options	Actuator with valve positioner Electric actuator Control head Open/close report (CE mark) Kinetrol swivel drive Adjustments to customer requirements
Mark	Conform EHEDG EL

MAINTENANCE	
Seal types 95 and 98	T-profile seal and shaft loops
Seal between flanges	DIN 11864-A (O-ring)

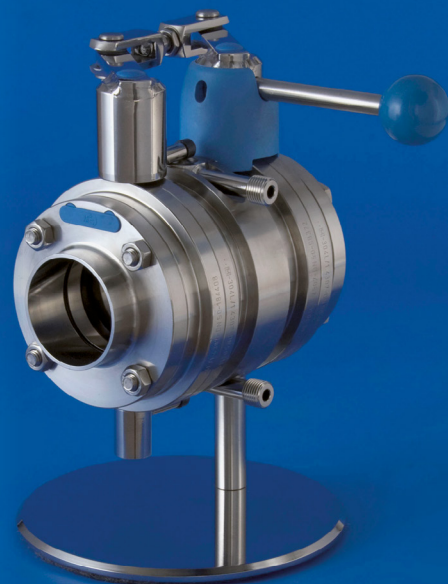
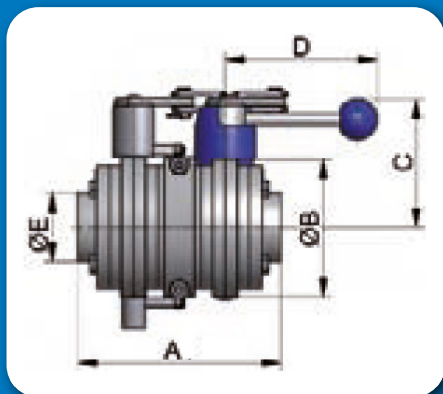




# LEAK DETECTION VALVE MANUAL OPERATED TYPE LSV07

DIN	A1	B	C	D	E1
DN25	150	87	98	122	29
DN32	150	92	101	122	35
DN40	160	97	103	122	41
DN50	160	110	109	122	53
DN65	160	127	118	150	70
DN80	172	142	129	150	85
DN100	190	162	139	150	104
DN125	240	202	159	250	129
DN150	264	231	174	250	154

INCH	A1	B	C	D	E
1" (25,4)	150	87	98	122	25,4
1,5" (38,1)	150	97	103	122	38,1
2" (50,8)	160	110	109	122	50,8
2,5" (63,5)	160	127	118	150	63,5
3" (76,1)	172	142	129	150	76,1
4" (101,6)	190	162	139	150	101,6



### 1 Leakage seat valve

DIN	304/EPDM	316/EPDM	304/FKM	316/FKM	304/HNBR	316/HNBR
DN25	22633005MS	22636005MS	22643005MS	22646005MS	22623005MS	22626005MS
DN32	22633007MS	22636007MS	22643007MS	22646007MS	22623007MS	22626007MS
DN40	22633009MS	22636009MS	22643009MS	22646009MS	22623009MS	22626009MS
DN50	22633011MS	22636011MS	22643011MS	22646011MS	22623011MS	22626011MS
DN65	22633013MS	22636013MS	22643013MS	22646013MS	22623013MS	22626013MS
DN80	22633015MS	22636015MS	22643015MS	22646015MS	22623015MS	22626015MS
DN100	22633017MS	22636017MS	22643017MS	22646017MS	22623017MS	22626017MS
DN125	22633018MS	22636018MS	22643018MS	22646018MS	22623018MS	22626018MS
DN150	22633019MS	22636019MS	22643019MS	22646019MS	22623019MS	22626019MS

### 1 Leakage seat valve

INCH	304/EPDM	316/EPDM	304/FKM	316/FKM	304/HNBR	316/HNBR
1" (25,4)	22633004MS	22636004MS	22643004MS	22646004MS	22623004MS	22626004MS
1,5" (38,1)	22633008MS	22636008MS	22643008MS	22646008MS	22623008MS	22626008MS
2" (50,8)	22633010MS	22636010MS	22643010MS	22646010MS	22623010MS	22626010MS
2,5" (63,5)	22633012MS	22636012MS	22643012MS	22646012MS	22623012MS	22626012MS
3" (76,1)	22633014MS	22636014MS	22643014MS	22646014MS	22623014MS	22626014MS
4" (101,6)	22633016MS	22636016MS	22643016MS	22646016MS	22623016MS	22626016MS

### 2 Leakage seat valves

DIN	304/EPDM	316/EPDM	304/FKM	316/FKM	304/HNBR	316/HNBR
DN25	22833005MS	22836005MS	22843005MS	22846005MS	22823005MS	22826005MS
DN32	22833007MS	22836007MS	22843007MS	22846007MS	22823007MS	22826007MS
DN40	22833009MS	22836009MS	22843009MS	22846009MS	22823009MS	22826009MS
DN50	22833011MS	22836011MS	22843011MS	22846011MS	22823011MS	22826011MS
DN65	22833013MS	22836013MS	22843013MS	22846013MS	22823013MS	22826013MS
DN80	22833015MS	22836015MS	22843015MS	22846015MS	22823015MS	22826015MS
DN100	22833017MS	22836017MS	22843017MS	22846017MS	22823017MS	22826017MS
DN125	22833018MS	22836018MS	22843018MS	22846018MS	22823018MS	22826018MS
DN150	22833019MS	22836019MS	22843019MS	22846019MS	22823019MS	22826019MS

### 2 Leakage seat valve

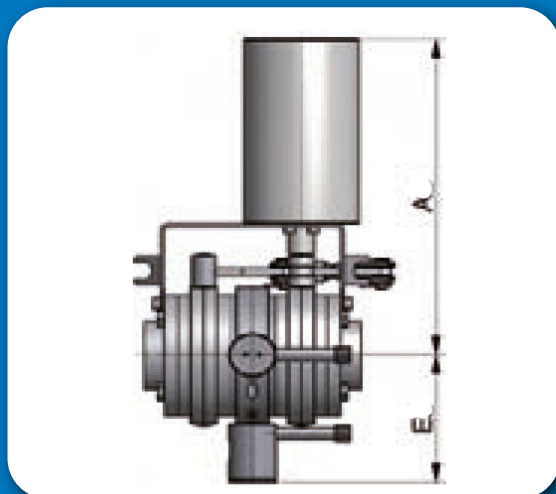
INCH	304/EPDM	316/EPDM	304/FKM	316/FKM	304/HNBR	316/HNBR
1" (25,4)	22833004MS	22836004MS	22843004MS	22846004MS	22823004MS	22826004MS
1,5" (38,1)	22833008MS	22836008MS	22843008MS	22846008MS	22823008MS	22826008MS
2" (50,8)	22833010MS	22836010MS	22843010MS	22846010MS	22823010MS	22826010MS
2,5" (63,5)	22833012MS	22836012MS	22843012MS	22846012MS	22823012MS	22826012MS
3" (76,1)	22833014MS	22836014MS	22843014MS	22846014MS	22823014MS	22826014MS
4" (101,6)	22833016MS	22836016MS	22843016MS	22846016MS	22823016MS	22826016MS

# LEAK DETECTION VALVE PNEUMATIC ACTUATOR

## TYPE LSV07

DIN	A2	B	C	D	E2
DN25	243	87	98	122	69
DN32	246	92	101	122	71
DN40	249	97	103	122	74
DN50	249	110	109	122	81
DN65	264	127	118	150	89
DN80	331	142	129	150	97
DN100	342	162	139	150	107
DN125	361	202	159	250	127
DN150	375	231	174	250	141

INCH	A2	B	C	D	E2
1" (25,4)	243	87	98	122	69
1,5" (38,1)	249	97	103	122	74
2" (50,8)	249	110	109	122	81
2,5" (63,5)	264	127	118	150	89
3" (76,1)	331	142	129	150	97
4" (101,6)	342	162	139	150	107



### 1 Leakage seat valve

DIN	304/EPDM	316/EPDM	304/FKM	316/FKM	304/HNBR	316/HNBR
DN25	22633805MS	22636805MS	22643805MS	22646805MS	22623805MS	22626805MS
DN32	22633807MS	22636807MS	22643807MS	22646807MS	22623807MS	22626807MS
DN40	22633809MS	22636809MS	22643809MS	22646809MS	22623809MS	22626809MS
DN50	22633811MS	22636811MS	22643811MS	22646811MS	22623811MS	22626811MS
DN65	22633813MS	22636813MS	22643813MS	22646813MS	22623813MS	22626813MS
DN80	22633815MS	22636815MS	22643815MS	22646815MS	22623815MS	22626815MS
DN100	22633817MS	22636817MS	22643817MS	22646817MS	22623817MS	22626817MS
DN125	22633818MS	22636818MS	22643818MS	22646818MS	22623818MS	22626818MS
DN150	22633819MS	22636819MS	22643819MS	22646819MS	22623819MS	22626819MS

### 1 Leakage seat valve

INCH	304/EPDM	316/EPDM	304/FKM	316/FKM	304/HNBR	316/HNBR
1" (25,4)	22633804MS	22636804MS	22643804MS	22646804MS	22623804MS	22626804MS
1,5" (38,1)	22633808MS	22636808MS	22643808MS	22646808MS	22623808MS	22626808MS
2" (50,8)	22633818MS	22636818MS	22643818MS	22646818MS	22623818MS	22626818MS
2,5" (63,5)	22633812MS	22636812MS	22643812MS	22646812MS	22623812MS	22626812MS
3" (76,1)	22633814MS	22636814MS	22643814MS	22646814MS	22623814MS	22626814MS
4" (101,6)	22633816MS	22636816MS	22643816MS	22646816MS	22623816MS	22626816MS

### 2 Leakage seat valves

DIN	304/EPDM	316/EPDM	304/FKM	316/FKM	304/HNBR	316/HNBR
DN25	22833805MS	22836805MS	22843805MS	22846805MS	22823805MS	22826805MS
DN32	22833807MS	22836807MS	22843807MS	22846807MS	22823807MS	22826807MS
DN40	22833809MS	22836809MS	22843809MS	22846809MS	22823809MS	22826809MS
DN50	22833811MS	22836811MS	22843811MS	22846811MS	22823811MS	22826811MS
DN65	22833813MS	22836813MS	22843813MS	22846813MS	22823813MS	22826813MS
DN80	22833815MS	22836815MS	22843815MS	22846815MS	22823815MS	22826815MS
DN100	22833817MS	22836817MS	22843817MS	22846817MS	22823817MS	22826817MS
DN125	22833818MS	22836818MS	22843818MS	22846818MS	22823818MS	22826818MS
DN150	22833819MS	22836819MS	22843819MS	22846819MS	22823819MS	22826819MS

### 2 Leakage seat valves

INCH	304/EPDM	316/EPDM	304/FKM	316/FKM	304/HNBR	316/HNBR
1" (25,4)	22833804MS	22836804MS	22843804MS	22846804MS	22823804MS	22826804MS
1,5" (38,1)	22833808MS	22836808MS	22843808MS	22846808MS	22823808MS	22826808MS
2" (50,8)	22833818MS	22836818MS	22843818MS	22846818MS	22823818MS	22826818MS
2,5" (63,5)	22833812MS	22836812MS	22843812MS	22846812MS	22823812MS	22826812MS
3" (76,1)	22833814MS	22836814MS	22843814MS	22846814MS	22823814MS	22826814MS
4" (101,6)	22833816MS	22836816MS	22843816MS	22846816MS	22823816MS	22826816MS

# SERVICE KIT

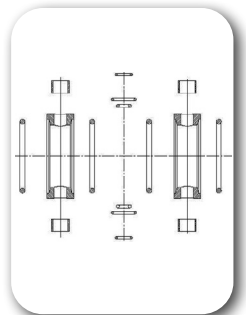
## Manual operated

DIN	HNBR	EPDM	FKM (VITON)
DN25	22120046MS	22130046MS	22140046MS
DN32	22120048MS	22130048MS	22140048MS
DN40	22120050MS	22130050MS	22140050MS
DN50	22120052MS	22130052MS	22140052MS
DN65	22120054MS	22130054MS	22140054MS
DN80	22120056MS	22130056MS	22140056MS
DN100	22120060MS	22130060MS	22140060MS
DN125	22120058MS	22130058MS	22140058MS
DN150	22120062MS	22130062MS	22140062MS



## Manual operated

INCH	HNBR	EPDM	FKM (VITON)
1"	22120045MS	22130045MS	22140045MS
1,5"	22120049MS	22130049MS	22140049MS
2"	22120051MS	22130051MS	22140051MS
2,5"	22120053MS	22130053MS	22140053MS
3"	22120055MS	22130055MS	22140055MS
4"	22120057MS	22130057MS	22140057MS



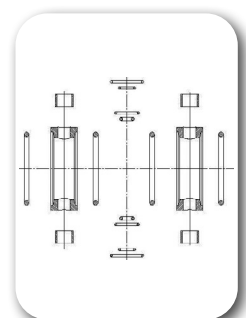
## Pneumatic actuator

DIN	HNBR	EPDM	FKM (VITON)
DN25	22120005MS	22130005MS	22140005MS
DN32	22120007MS	22130007MS	22140007MS
DN40	22120009MS	22130009MS	22140009MS
DN50	22120011MS	22130011MS	22140011MS
DN65	22120013MS	22130013MS	22140013MS
DN80	22120015MS	22130015MS	22140015MS
DN100	22120017MS	22130017MS	22140017MS
DN125	22120018MS	22130018MS	22140018MS
DN150	22120019MS	22130019MS	22140019MS



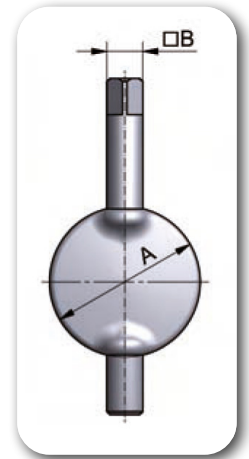
## Pneumatic actuator

INCH	HNBR	EPDM	FKM (VITON)
1"	22120004MS	22130004MS	22140004MS
1,5"	22120008MS	22130008MS	22140008MS
2"	22120010MS	22130010MS	22140010MS
2,5"	22120012MS	22130012MS	22140012MS
3"	22120014MS	22130014MS	22140014MS
4"	22120016MS	22130016MS	22140016MS



DIN	A	B	KG	304L	316L
DN25	26,0	9,5	0,050	27134105MS	27138105MS
DN32	32,0	9,5	0,060	27134107MS	27138107MS
DN40	38,0	9,5	0,090	27134109MS	7138109MS
DN50	50,0	9,5	0,135	27134111MS	27138111MS
DN65	66,0	9,5	0,225	27134113MS	27138113MS
DN80	81,0	9,5	0,325	27134115MS	27138115MS
DN100	100,0	9,5	0,620	27134117MS	27138117MS
DN125	125,0	14,0	1,370	-	27138119MS
DN150	150,0	14,0	1,820	-	27138121MS

INCH	A	B	KG	304	316
1" / 15 - 20	22,7	9,5	0,050	27134104MS	27138104MS
1,5"	35,7	9,5	0,085	27134108MS	27138108MS
2"	48,7	9,5	0,135	27134110MS	27138110MS
2,5"	60,7	9,5	0,210	27134112MS	27138112MS
3"	72,0	9,5	0,285	27134114MS	27138114MS
4"	97,8	9,5	0,620	-	27138116MS



# BALL VALVES

The ball valves from M&S can be used wherever a complete passage is required. For example with an application that must be piggable or with an application with aggressive chemicals. The M&S ball valves are equipped with PTFE seals and O-rings that are fitted with a FEP as standard. Because of the various air and manual controls, they can be used in any application. The simple way of construction also offers the possibility to easily demount these valves for maintenance. The PTFE are pressed into the housing by O-rings. This prevents the seal from being lifted during switching operations while using this valve. In addition, the PTFE don't expand. This is an important aspect when pigging your application. The between flanges version of the M&S ball valves are centered sealed, using the proven DIN 18864 O-rings.

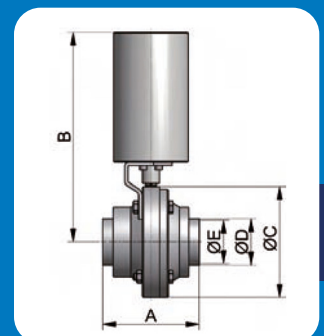
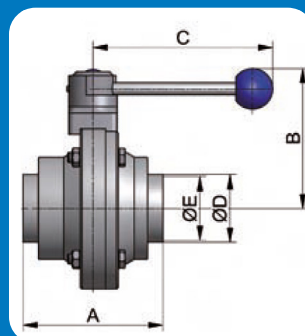
The TOP16 control head gives you the possibility to control the valve and to check the position of the ball valve.

MATERIAL	TYPE SV04
Product contact parts	Stainless steel 316 W. St. 1.4404
Seal	Ball PTFE O-rings FKM (viton) and FEP
Maximum operating pressure	10 bar
Maximum temperature	Depends on medium
Dimensions	DN25 - DN100
Possible seal	EPDM, VMQ (silicone), FKM (Viton) and HNBR.

PERFORMANCE	
Connection	Weld/Weld Flange/Flange
Options	Proximity switches Control head TOP16

## Spare parts

TYPE	DIN	ART.
Ball valve spare parts set PTFE/FEP	DN25	23146005MS
	DN40	23146009MS
	DN50	23146011MS
	DN65	23146013MS
	DN80	23146015MS
	DN100	23146017MS



### Including handle weld/weld

DIN	A	B	C	D	E	ART. NR.
DN25	71	93	150	29	26	23138005MS
DN40	92	102	150	41	38	23138009MS
DN50	110	110	150	53	50	231380011MS
DN65	136	126	220	70	66	23138013MS
DN80	146	137	220	85	81	23138015MS
DN100	190	155	220	104	100	23138017MS

### Pneumatic actuator weld/weld

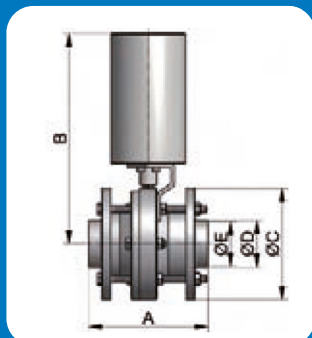
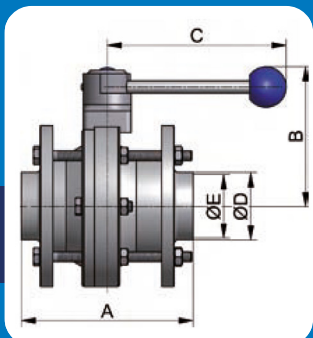
DIN	A	B	C	D	E	ART. NR.
DN25	71	223	92	29	26	23138805MS
DN40	92	232	110	41	38	23138809MS
DN50	110	242	127	53	50	231388011MS
DN65	136	310	142	70	66	23138813MS
DN80	146	320	162	85	81	23138815MS
DN100	190	340	200	104	100	23138817MS

### Including handle flange/flange

DIN	A	B	C	D	E	ART. NR.
DN25	97	93	150	29	26	23838005MS
DN40	122	102	150	41	38	23838009MS
DN50	136	110	150	53	50	238380011MS
DN65	168	126	220	70	66	23838013MS
DN80	183	137	220	85	81	23838015MS
DN100	238	155	220	104	100	23838017MS

### Pneumatic actuator flange/flange

DIN	A	B	C	D	E	ART. NR.
DN25	97	223	92	29	26	23838805MS
DN40	122	232	110	41	38	23838809MS
DN50	136	242	127	53	50	238388011MS
DN65	168	310	142	70	66	23838813MS
DN80	183	320	162	85	81	23838815MS
DN100	238	340	200	104	100	23838817MS





	VMQ (SILICONE)	NBR (PERBUNAN)	EPDM	FKM (VITON)	HNBR
Colour	Red	Blue	Black	Black	Black
Quality mark	FDA	FDA	FDA	FDA	FDA
Temperature:					
- Water	-30 °C - 100 °C	-20 °C - 100 °C	-40 °C - 130 °C	15 °C - 140 °C	25 °C - 130 °C
- Steam (max.)	Short 120 °C	Short 130 °C	Short 140 °C	Not applicable	Short 140 °C
- Acids / alkalis	Depending on concentration	Depending on concentration	Depending on concentration	Depending on concentration	Depending on concentration
Examples:					
- Corrosive soda solution 5%	B	B	A	B	A
- Nitric acid 5%	B	B	A	A	A
- Phosphoric acid 2%	A	A	A	A	A
- Milk <5% fat	A	A	A	A	A
- Beer, cold wort	A	A	A	A	A
- Hot wort	C	C	B	C	A
- Distilled water			A		A
Generally:					
- Non-organic salts	B	B	A	A	A
- Diluted alkalis	B	B	A	B	A
- Diluted non-organic salts	B	B	A	A	B
- Concentrated alkalis	C	C	A	C	B
- Unconcentrated acids	C	C	B	A	C
- Alcohol	B	C	A	A	B
- Organic acids	C	C	B	C	C
- Ester	B	B	A	C	B
- Ether	B	B	C	C	C
- Hydrocarbon	C	B	C	B	C
- Fuels	C	B	C	A	B
- Mineral oils & fats	B	B	C	A	A
- Animal oils & fats	B	A	C	A	A
- Vegetable oils & fats	B	A	C	A	A
- Ozone	A	C	A	A	A

A: Good resistance to – B: Limited resistance to – C: Not resistant to