



STAN

İstanbul Piston ve Bağlantı Elemanları
Gas Spring Manufacturer
Gazlı Amortisör Üreticisi



Fragmanımıza QR
kodu tarayarak
ulaşabilirsiniz. 



High Performance Gas Springs

General information and application

Lift your loads with STAN high performance gas springs, always smoothly and effortlessly, without jerking. Our diverse applications are as numerous as our models. Shock absorbers produced in certain norm sizes are available in our stocks. We manufacture your Gas Springs for you. Even if your Custom App is for small quantity orders. As a counterweight or to assist movement, STAN high performance gas springs are ideal for a wide variety of applications. They provide controlled movement. Seamlessly and effortlessly. In gas springs, pressurized nitrogen gas acts on the piston rod. In addition, oil reduces harsh movements and end positions. Special low-friction seals provide very long life and exceptional efficiency.



Teknik Detaylar

Force	Nitrogen (N), non-flammable (max. 2500N)
Damping fluid	Hydraulic oil, (Mineral oil, silicone oil)
Operational temperature	10 °C (-30 °C with special oil) to 80 °C
Number of moves/cycles	Max. 6 cycles per minute
Cylinder (Ø 15–28 mm)	Steel tube (chrome, paint coated)
Piston rod (Ø 6–14 mm)	Steel shaft (High carbon, surface hardened)
Force range	Variable by diameter and length (max. 2500N) In
Stroke length, tolerance	The range of 10 mm to 1000 mm (tolerance ±2 mm)

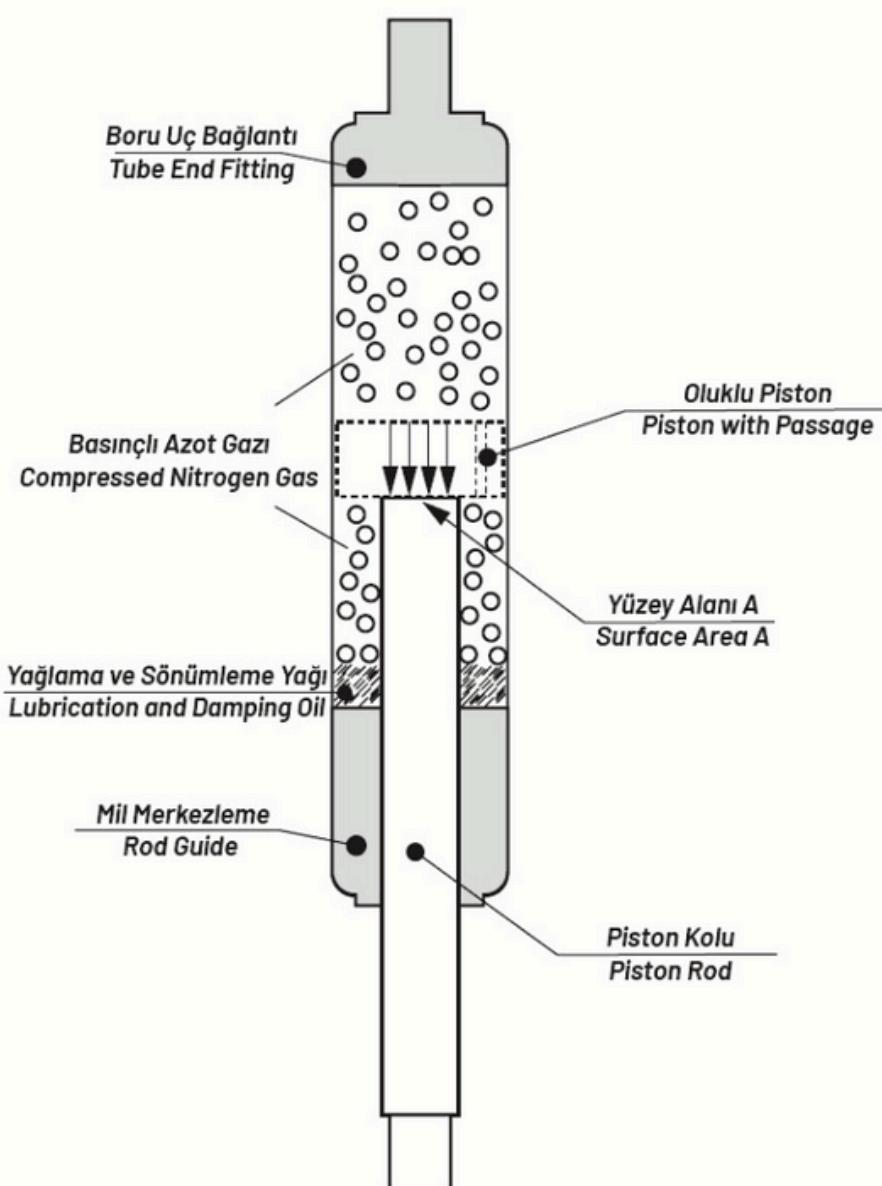
Working Principle



In this section you will find detailed information about the operation of different types of gas springs. All gas springs work on the same basic principle:

Gas springs are filled with nitrogen gas to a suitable pressure. This pressure is equal on both sides of the piston. The piston rod always extends because the surface area of the piston with the piston rod attached is smaller than the surface area of the other side of the piston without the piston rod attached. The resulting force in Newtons [N] can be calculated by multiplying the gas pressure.

P [bar] relative to the surface area of the piston rod A [mm²]: $F = P \times A$



Additional Information



This section provides information on additional options that allow you to use gas struts in certain applications or simply make them much easier to use. Additional options available for each gas strut can be found in the corresponding data sheets for each gas strut type. Please note the details regarding the different lengths of the shock absorbers, as some additional options increase the minimum length of the cylinder.

Temperature, Corrosion

Gas struts are filled with nitrogen gas and hydraulic oil at approx. 20 °C. Internal pressure and elongation force decrease at low temperatures and increase at high temperatures.

The force of the gas spring changes by approximately 1% for every 3 °C difference in filling temperature.

STAN gas struts are designed for temperatures between minus 10 °C and plus 80 °C.

STAN gas struts can also be used from minus 30 °C in case of special seals and special hydraulic oil.

Seals can no longer be guaranteed to work perfectly at temperatures above 80 °C, so avoid using them near ovens, fire, heating and the sun's rays behind glass.

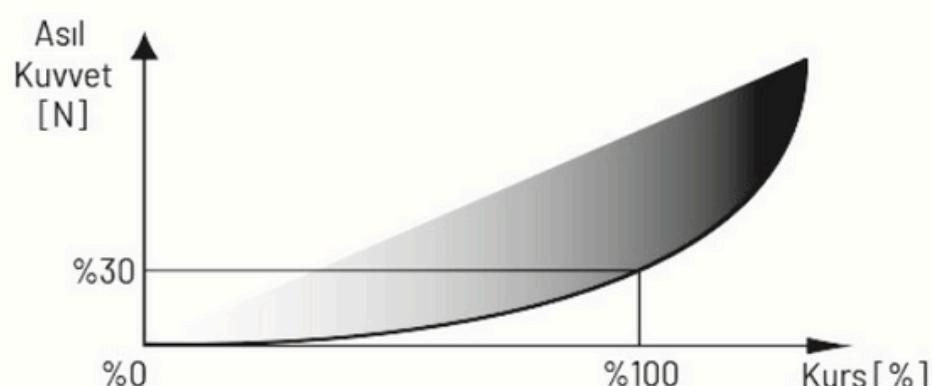
Gas struts become hot when they are operated quickly and frequently, even at normal room temperature. Therefore, make sure that it is not run more than about 6 times per minute.

If you have an application with high course rates, we are always ready to run tests and advise you. However, we recommend performing an additional test for your application.

If you intend to use gas struts outdoors, in damp or aggressive conditions, we recommend our stainless steel gas struts.



Progression



When the piston rod is pushed into the cylinder, there is less room for gas in the cylinder because the piston rod volume reduces the volume occupied by the remaining gas. Therefore, the gas pressure increases as the gas spring is compressed. This is called "gas spring progression". The increase in force is usually about 30% when the piston rod is fully compressed.

Thrust Type Gas Springs



STAN industrial push type gas springs are usually produced according to your needs. The table below gives you a brief summary of the types of thrust gas springs available. Normal progression of 30 - 40% is obtained by adding the fixed measurements given for the course giving the total length. Fixed measurements can be slightly reduced if a higher feed is desired. Below you will find information about additional options. More detailed data on each diameter range can be found on the following pages to help you choose your suitable gas spring. Alternatively, you can always use our consulting service.

Product Groups



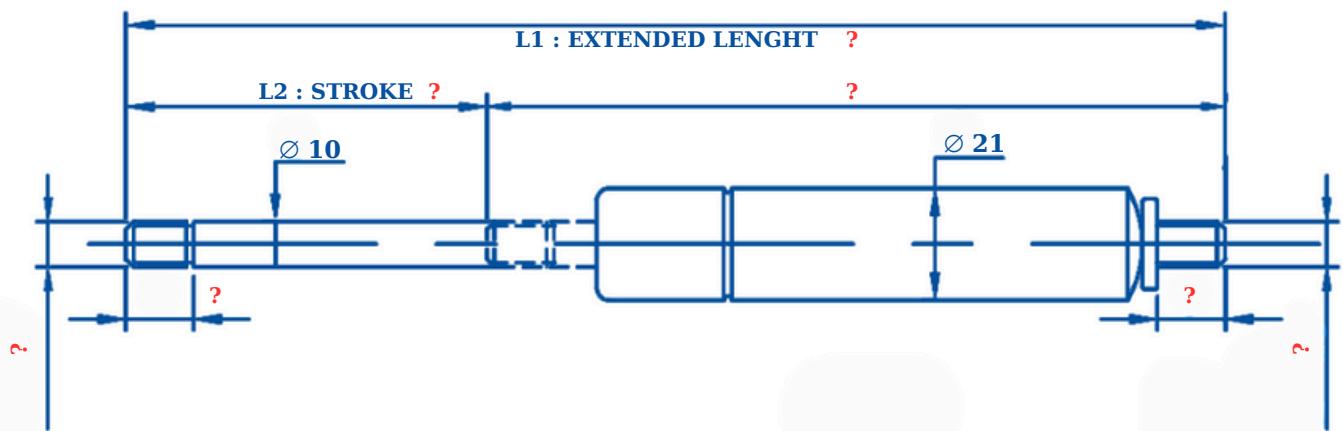
Ø Piston Kolu	6	8	10	10	14
Ø Silindir	15	18	21	22	28
Min. Kurs [mm]	20	40	40	40	50
Maks. Kurs [mm]	300	500	700	700	700
Min. Güç [N]	40	80	100	100	150
Maks. Güç [N]	400	700	1200	1300	2500
Kapalı Boy [mm]*	AB - K				
Açık Boy [mm]*	2x K + 35	2x K + 35	2x K + 45	2x K + 45	2x K + 50

Power [N], and stroke length [mm] are important when choosing for the required application. It will determine the group of gas springs and present the limits of the product, we remind you that the information presented in the table above is standard, when you need to go beyond the limits, we can design and produce special production gas springs.

While designing your gas spring, every detail is of great importance in the final product. In the images presented on the following pages, it is possible to obtain prototype product dimensions for your product, which is in the design phase, through template calculations.

Since different applications will require different fasteners, we offer fasteners in various and different sizes, joints that you can use in moving environments, eye and fork fasteners for constant movement, as well as design support for special fasteners for specific situations.

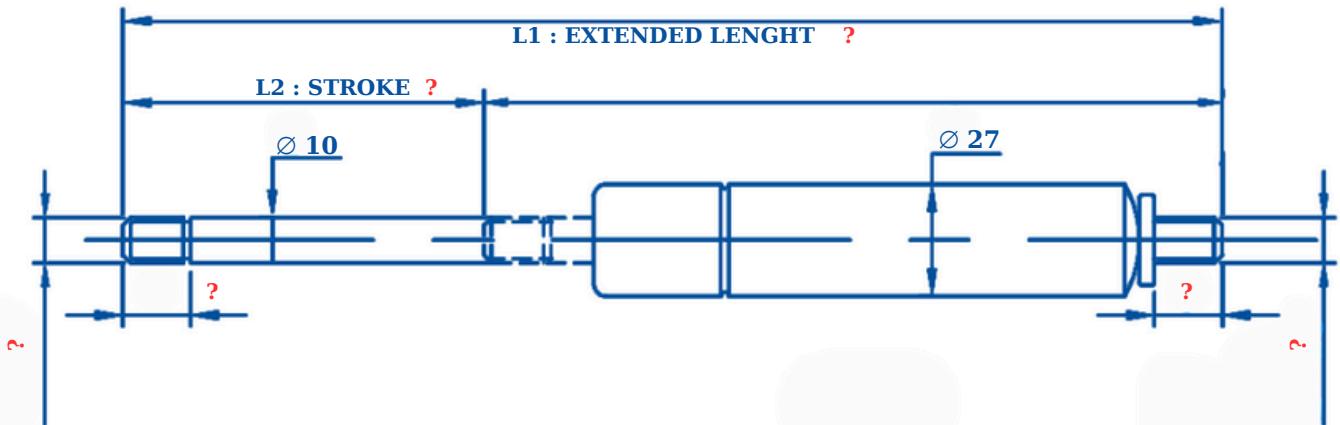
10-21 STAINLESS STEEL LIFT



For your custom orders, please provide the information for the points indicated by '?'.
Özel üretim siparişleriniz için "?" ile belirtilen noktaların bilgilerinizi iletiniz.

REFERANS NO:	F1 (N)	L1 EXTENDED LENGTH AÇIK BOY	L2 STROKE STORK
STN1021-270-100-877	700	270	100
STN1021-270-100-878	800	270	100
STN1021-270-100-879	900	270	100
STN1021-370-150-880	700	370	150
STN1021-370-150-881	800	370	150
STN1021-370-150-882	900	370	150
STN1021-470-200-883	700	470	200
STN1021-470-200-884	800	470	200
STN1021-470-200-885	900	470	200
STN1021-570-250-886	700	570	250
STN1021-570-250-887	800	570	250
STN1021-570-250-888	900	570	250
STN1021-690-300-889	150	690	300
STN1021-690-300-890	200	690	300
STN1021-690-300-891	250	690	300
STN1021-690-300-892	300	690	300
STN1021-690-300-893	350	690	300
STN1021-690-300-894	400	690	300
STN1021-690-300-895	500	690	300
STN1021-690-300-896	600	690	300
STN1021-690-300-897	700	690	300
STN1021-690-300-898	750	690	300
STN1021-690-300-899	800	690	300
STN1021-690-300-900	850	690	300
STN1021-690-300-901	900	690	300

REFERANS NO:	F1 (N)	L1 EXTENDED LENGTH AÇIK BOY	L2 STROKE STORK
STN1021-790-350-902	150	790	350
STN1021-790-350-903	200	790	350
STN1021-790-350-904	250	790	350
STN1021-790-350-905	300	790	350
STN1021-790-350-906	350	790	350
STN1021-790-350-907	400	790	350
STN1021-790-350-908	500	790	350
STN1021-790-350-909	600	790	350
STN1021-790-350-910	700	790	350
STN1021-790-350-911	750	790	350
STN1021-790-350-912	800	790	350
STN1021-790-350-913	850	790	350
STN1021-790-350-914	900	790	350
STN1021-890-400-915	150	890	400
STN1021-890-400-916	200	890	400
STN1021-890-400-917	250	890	400
STN1021-890-400-918	300	890	400
STN1021-890-400-919	350	890	400
STN1021-890-400-920	400	890	400
STN1021-890-400-921	450	890	400
STN1021-890-400-922	500	890	400
STN1021-890-400-923	550	890	400
STN1021-890-400-924	600	890	400
STN1021-890-400-925	650	890	400
STN1021-890-400-926	700	890	400

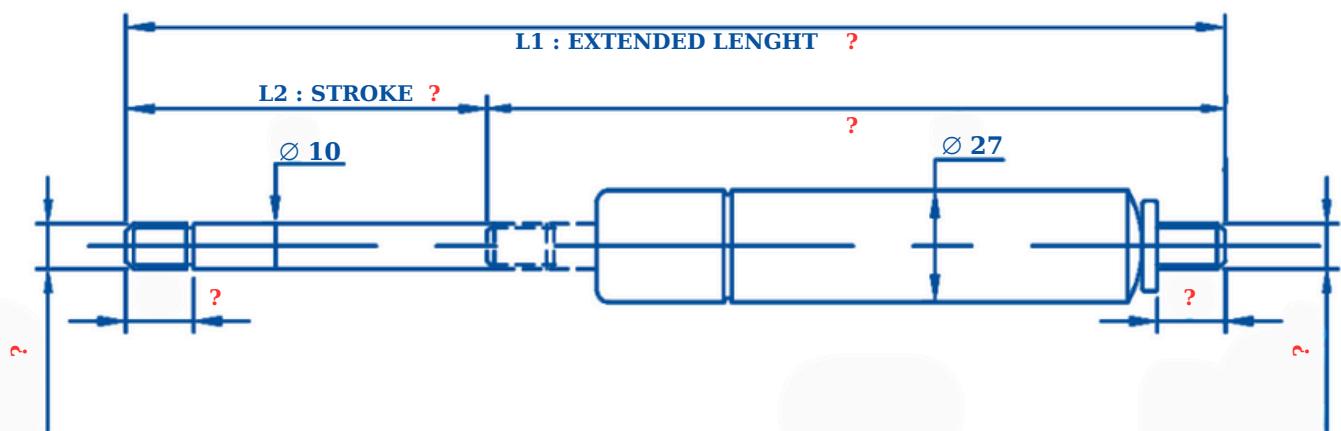
10-27 THREADED ENDS LIFT

For your custom orders, please provide the information for the points indicated by '?'.
Özel üretim siparişleriniz için "?" ile belirtilen noktaların bilgilerinizi iletiniz.

REFERANS NO:	F1 (N)	L1 EXTENDED LENGTH AÇIK BOY	L2 STROKE STORK
STN1027-270-100-1080	900	270	100
STN1027-270-100-1081	1000	270	100
STN1027-270-100-1082	1150	270	100
STN1027-370-150-1083	900	370	150
STN1027-370-150-1084	1000	370	150
STN1027-370-150-1085	1150	370	150
STN1027-470-200-1086	900	470	200
STN1027-470-200-1087	1000	470	200
STN1027-470-200-1088	1150	470	200
STN1027-570-250-1089	900	570	250
STN1027-570-250-1090	1000	570	250
STN1027-570-250-1091	1150	570	250
STN1027-670-300-1092	150	670	300
STN1027-670-300-1093	200	670	300
STN1027-670-300-1094	250	670	300
STN1027-670-300-1095	300	670	300
STN1027-670-300-1096	350	670	300
STN1027-670-300-1097	400	670	300
STN1027-670-300-1098	500	670	300
STN1027-670-300-1099	600	670	300
STN1027-670-300-1100	700	670	300
STN1027-670-300-1101	750	670	300
STN1027-670-300-1102	800	670	300
STN1027-670-300-1103	850	670	300
STN1027-670-300-1104	900	670	300
STN1027-670-300-1105	1000	670	300
STN1027-670-300-1106	1150	670	300

REFERANS NO:	F1 (N)	L1 EXTENDED LENGTH AÇIK BOY	L2 STROKE STORK
STN1027-785-350-1107	150	785	350
STN1027-785-350-1108	200	785	350
STN1027-785-350-1109	250	785	350
STN1027-785-350-1110	300	785	350
STN1027-785-350-1111	350	785	350
STN1027-785-350-1112	400	785	350
STN1027-785-350-1113	500	785	350
STN1027-785-350-1114	600	785	350
STN1027-785-350-1115	700	785	350
STN1027-785-350-1116	750	785	350
STN1027-785-350-1117	800	785	350
STN1027-785-350-1118	850	785	350
STN1027-785-350-1119	900	785	350
STN1027-885-400-1120	150	885	400
STN1027-885-400-1121	200	885	400
STN1027-885-400-1122	250	885	400
STN1027-885-400-1123	300	885	400
STN1027-885-400-1124	350	885	400
STN1027-885-400-1125	400	885	400
STN1027-885-400-1126	450	885	400
STN1027-885-400-1127	500	885	400
STN1027-885-400-1128	550	885	400
STN1027-885-400-1129	600	885	400
STN1027-885-400-1130	650	885	400
STN1027-885-400-1131	700	885	400
STN1027-885-400-1132	800	885	400
STN1027-885-400-1133	900	885	400

10-27 THREADED ENDS LIFT

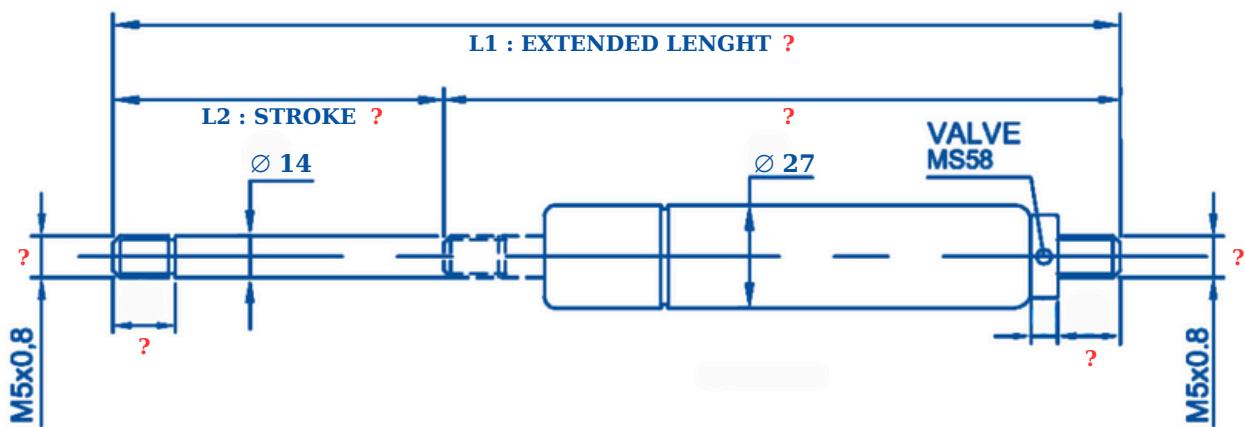


For your custom orders, please provide the information for the points indicated by '?'.
Özel üretim siparişleriniz için "?" ile belirtilen noktaların bilgilerinizi iletiniz.

REFERANS NO:	F1 (N)	L1 EXTENDED LENGTH AÇIK BOY	L2 STROKE STORK
STN1027-270-100-1080	900	270	100
STN1027-270-100-1081	1000	270	100
STN1027-270-100-1082	1150	270	100
STN1027-370-150-1083	900	370	150
STN1027-370-150-1084	1000	370	150
STN1027-370-150-1085	1150	370	150
STN1027-470-200-1086	900	470	200
STN1027-470-200-1087	1000	470	200
STN1027-470-200-1088	1150	470	200
STN1027-570-250-1089	900	570	250
STN1027-570-250-1090	1000	570	250
STN1027-570-250-1091	1150	570	250
STN1027-670-300-1092	150	670	300
STN1027-670-300-1093	200	670	300
STN1027-670-300-1094	250	670	300
STN1027-670-300-1095	300	670	300
STN1027-670-300-1096	350	670	300
STN1027-670-300-1097	400	670	300
STN1027-670-300-1098	500	670	300
STN1027-670-300-1099	600	670	300
STN1027-670-300-1100	700	670	300
STN1027-670-300-1101	750	670	300
STN1027-670-300-1102	800	670	300
STN1027-670-300-1103	850	670	300
STN1027-670-300-1104	900	670	300
STN1027-670-300-1105	1000	670	300
STN1027-670-300-1106	1150	670	300

REFERANS NO:	F1 (N)	L1 EXTENDED LENGTH AÇIK BOY	L2 STROKE STORK
STN1027-785-350-1107	150	785	350
STN1027-785-350-1108	200	785	350
STN1027-785-350-1109	250	785	350
STN1027-785-350-1110	300	785	350
STN1027-785-350-1111	350	785	350
STN1027-785-350-1112	400	785	350
STN1027-785-350-1113	500	785	350
STN1027-785-350-1114	600	785	350
STN1027-785-350-1115	700	785	350
STN1027-785-350-1116	750	785	350
STN1027-785-350-1117	800	785	350
STN1027-785-350-1118	850	785	350
STN1027-785-350-1119	900	785	350
STN1027-885-400-1120	150	885	400
STN1027-885-400-1121	200	885	400
STN1027-885-400-1122	250	885	400
STN1027-885-400-1123	300	885	400
STN1027-885-400-1124	350	885	400
STN1027-885-400-1125	400	885	400
STN1027-885-400-1126	450	885	400
STN1027-885-400-1127	500	885	400
STN1027-885-400-1128	550	885	400
STN1027-885-400-1129	600	885	400
STN1027-885-400-1130	650	885	400
STN1027-885-400-1131	700	885	400
STN1027-885-400-1132	800	885	400
STN1027-885-400-1133	900	885	400

14-27 VALVE LIFT

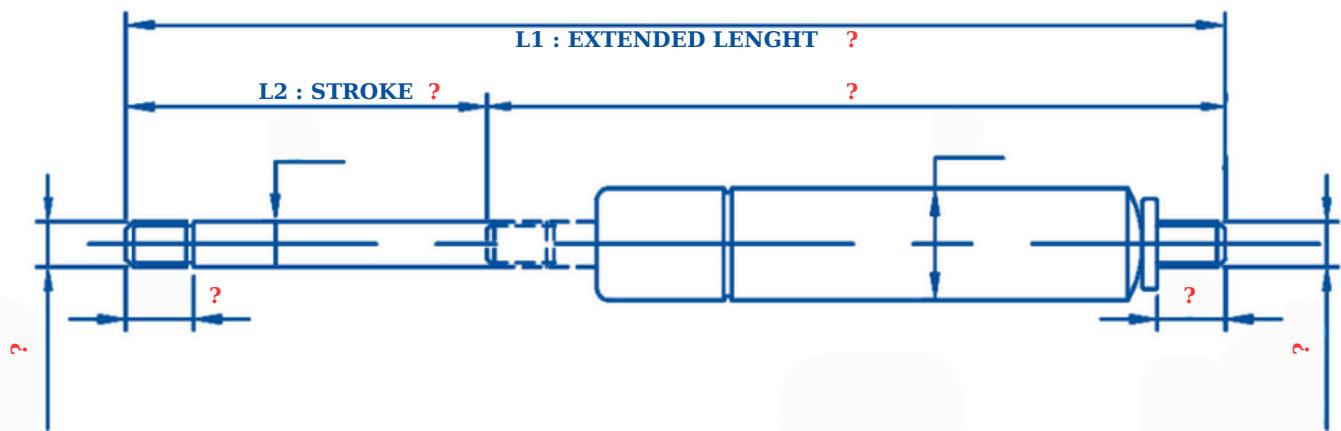


For your custom orders, please provide the information for the points indicated by '?'.
Özel üretim siparişleriniz için "?" ile belirtilen noktaların bilgilerinizi iletiniz.

REFERANS NO:	F1 (N)	L1 EXTENDED LENGTH AÇIK BOY	L2 STROKE STORK
STN1427-310-100-1184	1300	310	100
STN1427-310-100-1185	1500	310	100
STN1427-310-100-1186	1700	310	100
STN1427-310-100-1187	1900	310	100
STN1427-310-100-1188	2100	310	100
STN1427-410-150-1189	1300	410	150
STN1427-410-150-1190	1500	410	150
STN1427-410-150-1191	1700	410	150
STN1427-410-150-1192	1900	410	150
STN1427-410-150-1193	2100	410	150
STN1427-510-200-1194	1300	510	200
STN1427-510-200-1195	1500	510	200
STN1427-510-200-1196	1700	510	200
STN1427-510-200-1197	1900	510	200
STN1427-510-200-1198	2100	510	200
STN1427-610-250-1199	1300	610	250
STN1427-610-250-1200	1500	610	250
STN1427-610-250-1201	1700	610	250
STN1427-610-250-1202	1900	610	250
STN1427-610-250-1203	2100	610	250
STN1427-710-300-1204	1300	710	300
STN1427-710-300-1205	1500	710	300
STN1427-710-300-1206	1700	710	300
STN1427-710-300-1207	1900	710	300
STN1427-710-300-1208	2100	710	300

REFERANS NO:	F1 (N)	L1 EXTENDED LENGTH AÇIK BOY	L2 STROKE STORK
STN1427-810-350-1209	1300	810	350
STN1427-810-350-1210	1500	810	350
STN1427-810-350-1211	1700	810	350
STN1427-810-350-1212	1900	810	350
STN1427-810-350-1213	2100	810	350
STN1427-910-400-1214	1300	910	400
STN1427-910-400-1215	1500	910	400
STN1427-910-400-1216	1700	910	400
STN1427-910-400-1217	1900	910	400
STN1427-910-400-1218	2100	910	400
STN1427-1100-500-1219	500	1100	500
STN1427-1100-500-1220	600	1100	500
STN1427-1100-500-1221	700	1100	500
STN1427-1100-500-1222	800	1100	500
STN1427-1100-500-1223	900	1100	500
STN1427-1100-500-1224	1000	1100	500
STN1427-1100-500-1225	1100	1100	500
STN1427-1100-500-1226	1300	1100	500
STN1427-1100-500-1227	1500	1100	500
STN1427-1100-500-1228	1700	1100	500

14-27 THREADED ENDS LIFT

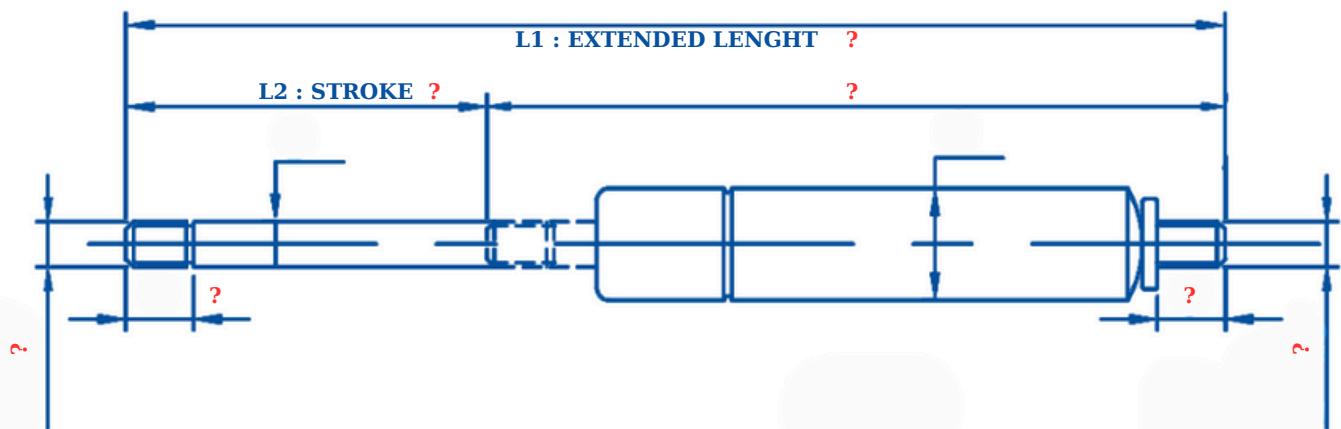


For your custom orders, please provide the information for the points indicated by '?'.
Özel üretim siparişleriniz için "?" ile belirtilen noktaların bilgilerinizi iletiniz.

REFERANS NO:	F1 (N)	L1 EXTENDED LENGTH AÇIK BOY	L2 STROKE STORK
STN1427-300-100-1229	1300	300	100
STN1427-300-100-1230	1500	300	100
STN1427-300-100-1231	1700	300	100
STN1427-300-100-1232	1900	300	100
STN1427-300-100-1233	2100	300	100
STN1427-400-150-1234	1300	400	150
STN1427-400-150-1235	1500	400	150
STN1427-400-150-1236	1700	400	150
STN1427-400-150-1237	1900	400	150
STN1427-400-150-1238	2100	400	150
STN1427-500-200-1239	1300	500	200
STN1427-500-200-1240	1500	500	200
STN1427-500-200-1241	1700	500	200
STN1427-500-200-1242	1900	500	200
STN1427-500-200-1243	2100	500	200
STN1427-600-250-1244	1300	600	250
STN1427-600-250-1245	1500	600	250
STN1427-600-250-1246	1700	600	250
STN1427-600-250-1247	1900	600	250
STN1427-600-250-1248	2100	600	250
STN1427-700-300-1249	1300	700	300
STN1427-700-300-1250	1500	700	300
STN1427-700-300-1251	1700	700	300
STN1427-700-300-1252	1900	700	300
STN1427-700-300-1253	2100	700	300

REFERANS NO:	F1 (N)	L1 EXTENDED LENGTH AÇIK BOY	L2 STROKE STORK
STN1427-800-350-1254	1300	800	350
STN1427-800-350-1255	1500	800	350
STN1427-800-350-1256	1700	800	350
STN1427-800-350-1257	1900	800	350
STN1427-800-350-1258	2100	800	350
STN1427-900-400-1259	1300	900	400
STN1427-900-400-1260	1500	900	400
STN1427-900-400-1261	1700	900	400
STN1427-900-400-1262	1900	900	400
STN1427-900-400-1263	2100	900	400
STN1427-1100-500-1264	500	1100	500
STN1427-1100-500-1265	600	1100	500
STN1427-1100-500-1266	700	1100	500
STN1427-1100-500-1267	800	1100	500
STN1427-1100-500-1268	900	1100	500
STN1427-1100-500-1269	1000	1100	500
STN1427-1100-500-1270	1100	1100	500
STN1427-1100-500-1271	1300	1100	500
STN1427-1100-500-1272	1500	1100	500
STN1427-1100-500-1273	1700	1100	500

14-27 STAINLESS STEEL LIFT

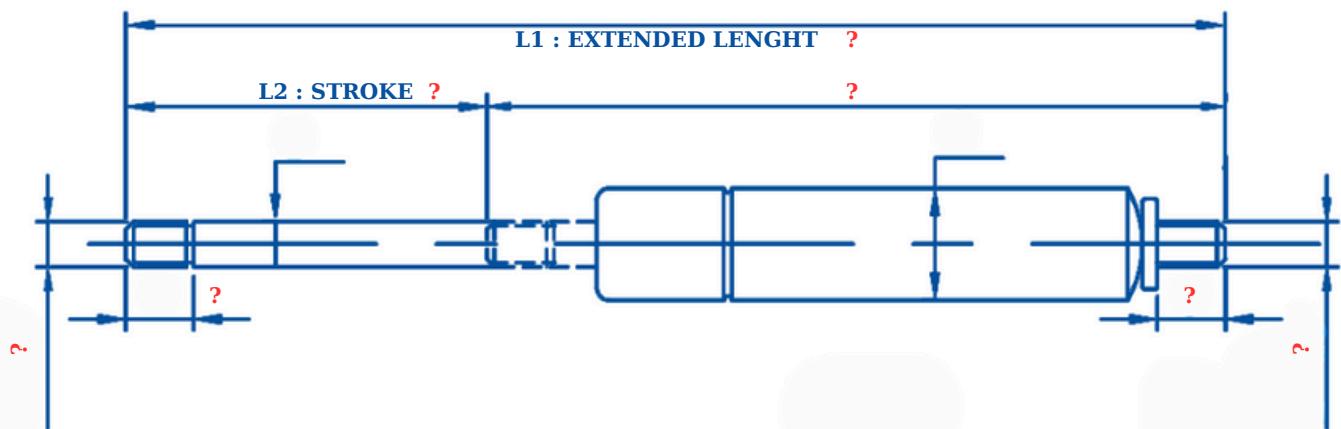


For your custom orders, please provide the information for the points indicated by '?'.
Özel üretim siparişleriniz için “?” ile belirtilen noktaların bilgilerinizi iletiniz.

REFERANS NO:	F1 (N)	L1 EXTENDED LENGTH AÇIK BOY	L2 STROKE STORK
STN1427-300-100-1274	1350	300	100
STN1427-300-100-1275	1500	300	100
STN1427-300-100-1276	1600	300	100
STN1427-300-100-1277	1700	300	100
STN1427-300-100-1278	1800	300	100
STN1427-400-150-1279	1350	400	150
STN1427-400-150-1280	1500	400	150
STN1427-400-150-1281	1600	400	150
STN1427-400-150-1282	1700	400	150
STN1427-400-150-1283	1800	400	150
STN1427-500-200-1284	1350	500	200
STN1427-500-200-1285	1500	500	200
STN1427-500-200-1286	1600	500	200
STN1427-500-200-1287	1700	500	200
STN1427-500-200-1288	1800	500	200
STN1427-600-250-1289	1350	600	250
STN1427-600-250-1290	1500	600	250
STN1427-600-250-1291	1600	600	250
STN1427-600-250-1292	1700	600	250
STN1427-600-250-1293	1800	600	250
STN1427-700-300-1294	1350	700	300
STN1427-700-300-1295	1500	700	300
STN1427-700-300-1296	1600	700	300
STN1427-700-300-1297	1700	700	300
STN1427-700-300-1298	1800	700	300

REFERANS NO:	F1 (N)	L1 EXTENDED LENGTH AÇIK BOY	L2 STROKE STORK
STN1427-800-350-1299	1350	800	350
STN1427-800-350-1300	1500	800	350
STN1427-800-350-1301	1600	800	350
STN1427-800-350-1302	1700	800	350
STN1427-800-350-1303	1800	800	350
STN1427-900-400-1304	1350	900	400
STN1427-900-400-1305	1500	900	400
STN1427-900-400-1306	1600	900	400
STN1427-900-400-1307	1700	900	400
STN1427-900-400-1308	1800	900	400
STN1427-1100-500-1309	500	1100	500
STN1427-1100-500-1310	600	1100	500
STN1427-1100-500-1311	700	1100	500
STN1427-1100-500-1312	800	1100	500
STN1427-1100-500-1313	900	1100	500
STN1427-1100-500-1314	1000	1100	500
STN1427-1100-500-1315	1100	1100	500
STN1427-1100-500-1316	1300	1100	500
STN1427-1100-500-1317	1400	1100	500
STN1427-1100-500-1318	1500	1100	500

20-40 THREADED ENDS LIFT



For your custom orders, please provide the information for the points indicated by '?'.
Özel üretim siparişleriniz için "?" ile belirtilen noktaların bilgilerinizi iletiniz.

REFERANS NO:	F1 (N)	L1 EXTENDED LENGTH AÇIK BOY	L2 STROKE STORK
STN2040-300-100-1319	1300	300	100
STN2040-300-100-1320	1500	300	100
STN2040-300-100-1321	1700	300	100
STN2040-300-100-1322	1900	300	100
STN2040-300-100-1323	2100	300	100
STN2040-400-150-1324	1300	400	150
STN2040-400-150-1325	1500	400	150
STN2040-400-150-1326	1700	400	150
STN2040-400-150-1327	1900	400	150
STN2040-400-150-1328	2100	400	150
STN2040-500-200-1329	1300	500	200
STN2040-500-200-1330	1500	500	200
STN2040-500-200-1331	1700	500	200
STN2040-500-200-1332	1900	500	200
STN2040-500-200-1333	2100	500	200
STN2040-600-250-1334	1300	600	250
STN2040-600-250-1335	1500	600	250
STN2040-600-250-1336	1700	600	250
STN2040-600-250-1337	1900	600	250
STN2040-600-250-1338	2100	600	250
STN2040-700-300-1339	1300	700	300
STN2040-700-300-1400	1500	700	300
STN2040-700-300-1401	1700	700	300
STN2040-700-300-1402	1900	700	300
STN2040-700-300-1403	2100	700	300

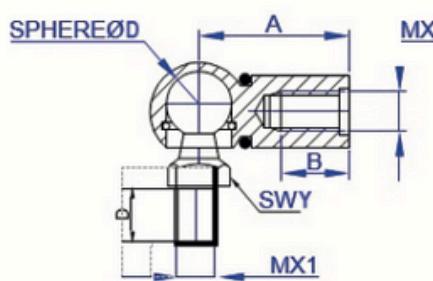
REFERANS NO:	F1 (N)	L1 EXTENDED LENGTH AÇIK BOY	L2 STROKE STORK
STN2040-800-350-1403	1300	800	350
STN2040-800-350-1404	1500	800	350
STN2040-800-350-1405	1700	800	350
STN2040-800-350-1406	1900	800	350
STN2040-800-350-1407	2100	800	350
STN2040-900-400-1408	1300	900	400
STN2040-900-400-1409	1500	900	400
STN2040-900-400-1410	1700	900	400
STN2040-900-400-1411	1900	900	400
STN2040-900-400-1412	2100	900	400
STN2040-1200-600-1413	500	1200	600
STN2040-1200-600-1414	600	1200	600
STN2040-1200-600-1415	700	1200	600
STN2040-1200-600-1416	800	1200	600
STN2040-1200-600-1417	900	1200	600
STN2040-1200-600-1418	1000	1200	600
STN2040-1200-600-1419	1100	1200	600
STN2040-1200-600-1420	1300	1200	600
STN2040-1200-600-1421	1500	1200	600
STN2040-1200-600-1422	1700	1200	600

Connectors

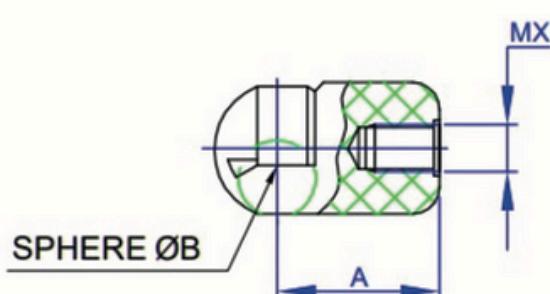


Fasteners are a safe and practical solution that makes gas springs suitable for use. In addition to being able to be designed in accordance with every environment and purpose of use, as required, standardized sizes are kept ready in stock, and they comply with the aesthetics of your design with different coatings. There are some terms of use in the plastic fasteners group, so it is very important to get an opinion from your consultant when choosing. There are different combinations between sizes, request a detailed list of the type of headpiece you are interested in from your consultant.

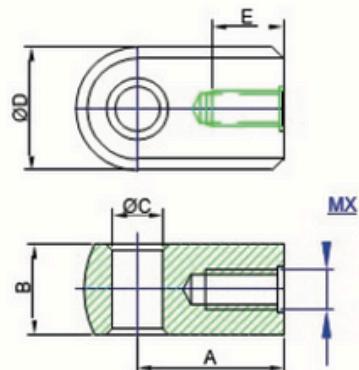
Ball Joint



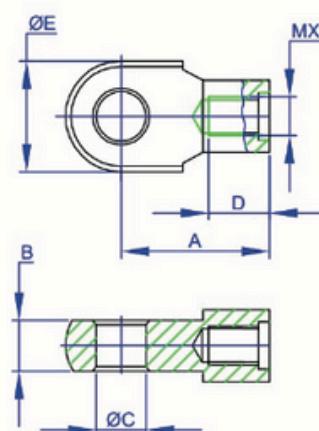
Plastic Joint



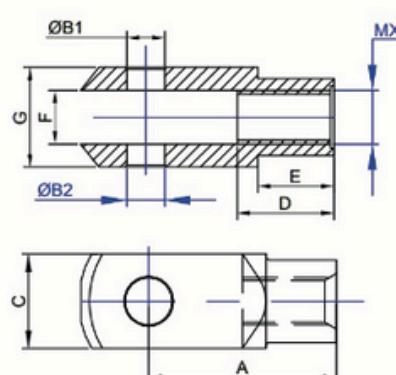
Eyelet



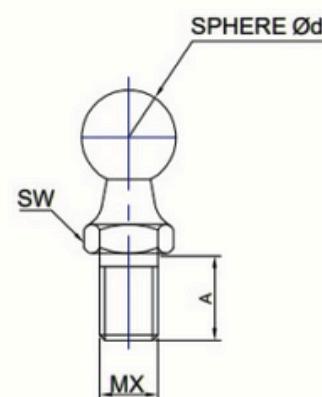
Eyelet



Clevis



Ball Joint



I STAN BUL P I S T O N



İSTANBUL PİSTON VE BAĞLANTI ELEMANLARI SAN. TİC. LTD. ŞTİ.

Kocabeton Sanayi Sitesi 3/15 41400 Gebze Kocaeli • Türkiye

No: +90 262 642 4777

E-mail: info@istanbulpiston.com